THE ELEMENTS OF HARMONY

JAMES LYON

THE

ELEMENTS OF HARMONY

BY

JAMES LYON

MUS. D. (OXON.)

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PREFACE.

THE object of this short work is to explain, as simply and concisely as possible, the elements of harmony, and to help the student to overcome difficulties which are more imaginary than real.

It is not sufficient for the student to answer the questions and harmonize the melodies and basses after reading each chapter. He must be able to *hear* what he writes, for until he can do this his labour will be vain, and the result of his work will be mathematics—not music.

By constant practice, and by analysing the chord progressions he plays, he will in due course be able to understand and better appreciate the works of the great masters.

J. L.

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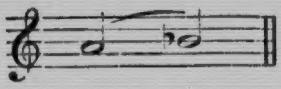
CHAPTER 1.

INTRODUCTORY.

1. Harmony may be defined as the systematic combination and progression of musical sounds.

[It bears a relationship to music somewhat similar to that which grammar bears to language.]

2. A Semitone is the smallest interval used in music, and is *diatonic* when the notes forming it are on different degrees of the scale:



(A diatonic semitone.)

It is *chromatic* when both notes are on the same degree of the staff, but when one is *altered accidentally:*

(A chromatic semitone.)

3. Two semitones equal a Tone.

4. A Scale consists of single sounds arranged alphabetically. The names of the various scale degrees are as follows:

I. Tonic.
II. Supertonic.
III. Mediant.
IV. Subdominant.
V. Dominant.
VI. Submediant (or super-dominant).
VII. Leading-note.

Example in the key of C:

Tonic, Supertonic, Mediant, Sub-dominant, Dominant, Sub-mediant, Leading-note.

Two forms of scale are used:

(*a*) Diatonic.
(*b*) Chromatic.

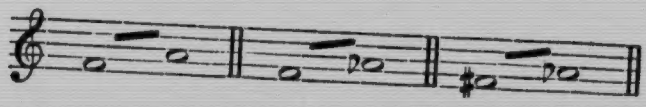
Diatonic.
Major. Minor.
Harmonic. Melodic.

Chromatic.
Harmonic. Melodic.

A diatonic major scale proceeds alphabetically by tones and semitones, so arranged that the semitones fall between the 3rd and 4th and between the 7th and 8th degrees. A chromatic scale proceeds entirely by semitones.

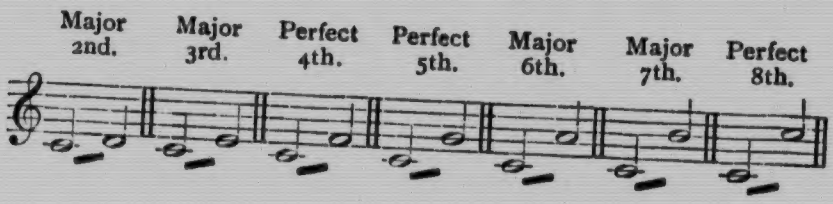
5. An Interval is the difference in pitch between one sound and another.

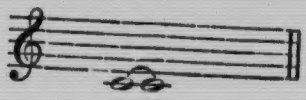
Intervals are reckoned upwards and inclusively. Thus:



are *all* 3rds because they contain three *letter names*, F, G, A.

Taking the major scale as a basis, the intervals from the keynote are:



[*The unison*  is *classed as perfect.*]

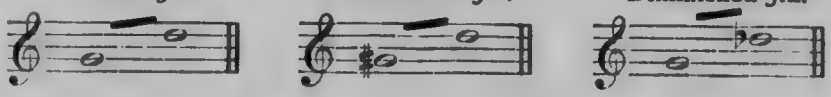
(i.) When a major interval is made a semitone smaller, chromatically, it becomes minor:

Major 6th. Minor 6th.

(ii.) When a minor or a perfect interval is made a semitone smaller it becomes diminished:

Minor 3rd. Diminished 3rd.

Perfect 5th. Diminished 5th. Diminished 5th.



(iii.) When a major or a perfect interval is made a semitone greater it becomes augmented:

Major 3rd. Augmented 3rd.

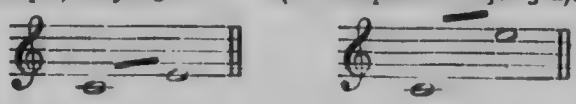
Perfect 5th. Augmented 5th.

Simple and Compound Intervals.

(*a*) An interval is simple when the two notes are contained within the octave compass.

(*b*) An interval is compound when the compass of an octave is exceeded.

(Simple) Major 3rd. (Compound) Major 10th (*or* Compound Major 3rd).



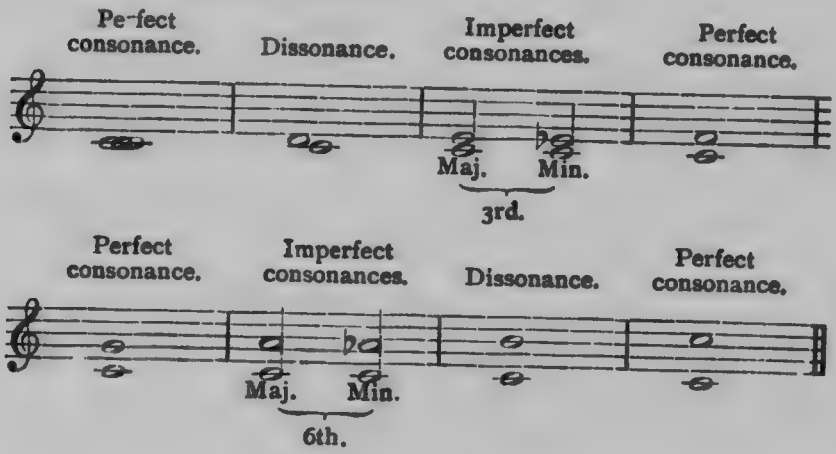
Consonant and Dissonant Intervals.

(i.) The unison, 4th, 5th, and 8th, are perfect consonances.

(ii.) The major and minor 3rd and major and minor 6th are imperfect consonances.

(iii.) The 2nd, 7th, 9th and all augmented or diminished intervals are dissonances.

Illustration in the key of C:



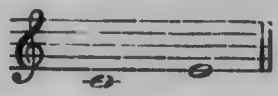
Inversion of Intervals.

An interval is said to be inverted when the lower note is written an 8th above its original position (or the higher note an 8th lower).

Major 3rd by inversion becomes a minor 6th.

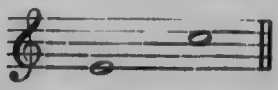
By inversion major intervals become minor.
" " minor " " major.
" " diminished " " augmented.
" " augmented " " diminished.
" " perfect intervals remain perfect.

[To find the inversion of a given interval, subtract the number of the interval from 9. Thus:



is a *major* 3rd.]

Subtract 3 from 9 and the result is:

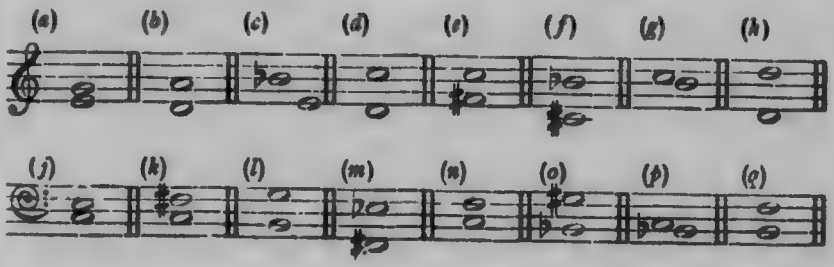


a *minor* 6th.

Intervals formed by the natural notes of a diatonic scale are called *diatonic*. When formed by the introduction of accidentals they are called *chromatic*.

Questions and Exercises on Chapter I.

1. What is Harmony?
2. Write the mediant and the dominant in the keys of A, B♭, and G.
3. Write the supertonic and the submediant in the keys of A♭, E, and F♯.
4. Explain the terms diatonic and chromatic.
5. What is an "interval"?
6. Write the perfect intervals in the keys of D, F, B.
7. Write the imperfect consonances in the keys of G, A, D♭.
8. Write the dissonant intervals in the keys of E♭, A♭, and B♭.
9. Write on the note E♭, one simple and one compound interval.
10. Give the inversions of the following intervals and name them:

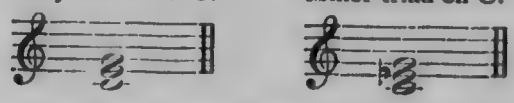


CHAPTER II.

PRIMARY TRIADS—MAJOR OR MINOR.

6. A Triad is a chord consisting of a note to which the major (or minor) 3rd, and the perfect 5th are added:

Major triad on C. Minor triad on C.



7. A triad can be written on each note of a major or minor scale.

Illustration in C major:

(*a*) Major. Minor. Minor. Major. Major. Minor. Diminished.

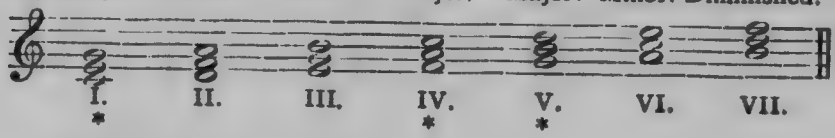
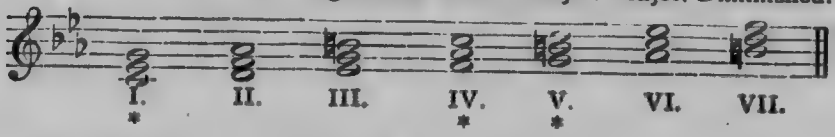


Illustration in C minor:

(*b*) Minor. Diminished. Augmented. Minor. Major. Major. Diminished.

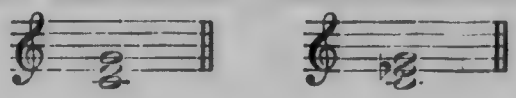


[*It should be noted that in the formation of the chords at* (*b*) *the harmonic minor is used.*]

8. The most important triads on the various degrees of the scale are those on the 1st, 4th, and 5th degrees. These are called the Primary Triads. They are marked with an asterisk at (*a*) and (*b*), and it will be observed that between them they contain all the notes of the scale. The other triads, on the 2nd, 3rd, 6th, and 7th degrees, are called Secondary.

(i.) A triad is major or minor according to its third and is called a common chord:

Major common chord of C. Minor common chord of C.



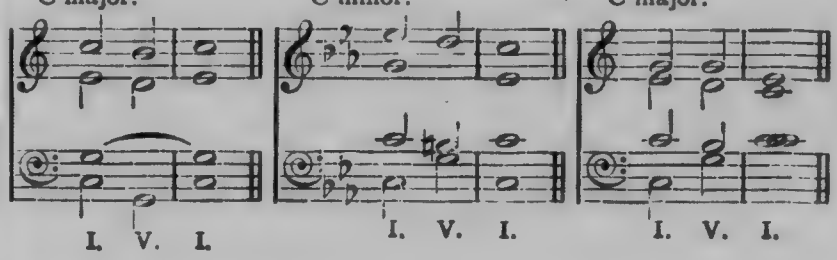
(ii.) The triad on the 7th degree of the scale is called *diminished* on account of its diminished 5th.

(iii.) The triad on the 3rd degree of a minor scale is called *augmented* on account of its augmented 5th.

9. Examples of the primary triads:

Tonic and Dominant.

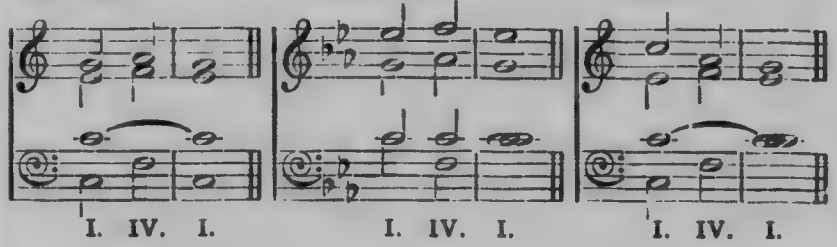
C major. C minor. C major.



I. V. I. I. V. I. I. V. I.

Tonic and Subdominant.

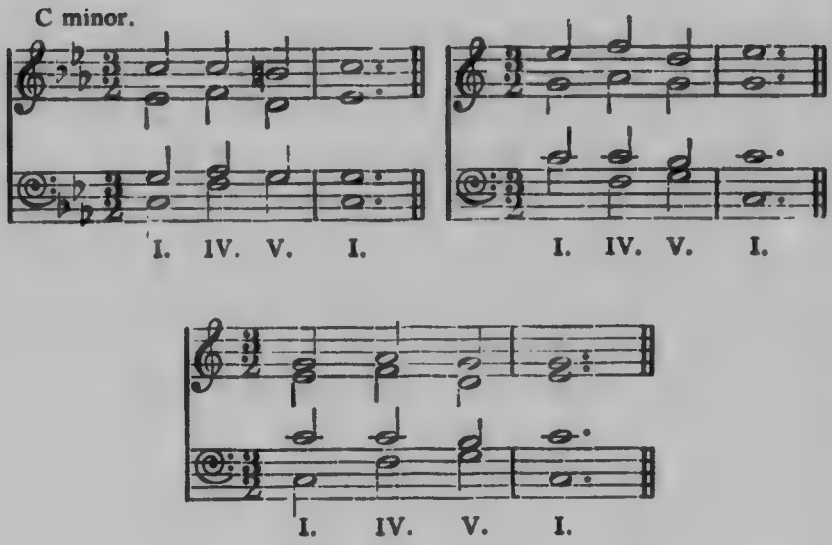
C major. C minor. C major.



I. IV. I. I. IV. I. I. IV. I.

Tonic, Subdominant, and Dominant.

C minor.

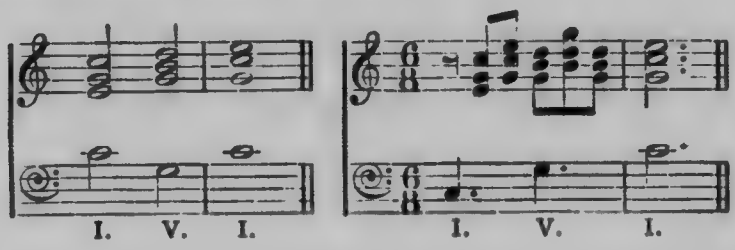


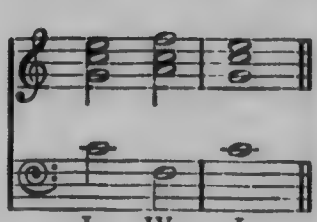
[*The progression V. to IV. is not considered so satisfactory as from IV. to V.*]

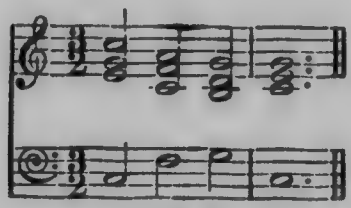
The foregoing examples are written in "extended" position, which should be used when writing in short score for voices.

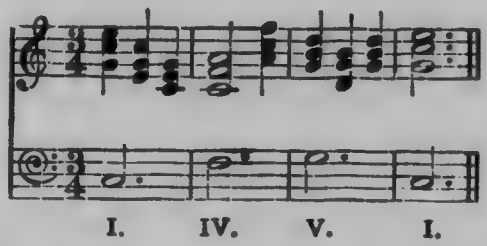
It will be well also to write exercises in "close" position. This is usually done by placing three parts on the upper staff and the bass, alone, on the lower.

Examples in "close" position:









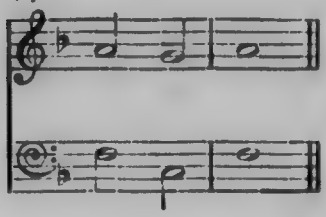
Questions and Exercises on Chapter II.

1. What is a triad?
2. Write the primary triads in the keys of D, E minor, and A♭.
3. Write the secondary triads in the keys of A, B♭, and F♯.
4. Write the augmented triads in the keys of F minor, B♭ minor, and G minor.
   (Insert key-signatures in all cases.)
5. On which degrees of a major scale do minor triads appear?

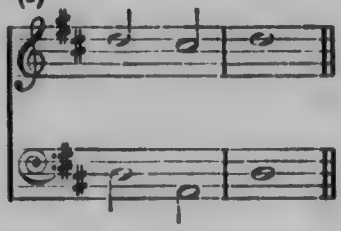
6. Harmonize the following, using primary triads only, in extended position:

Add alto and tenor.

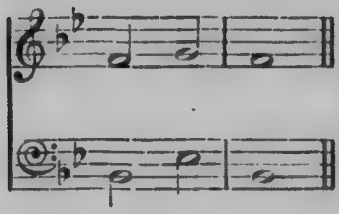
(a)



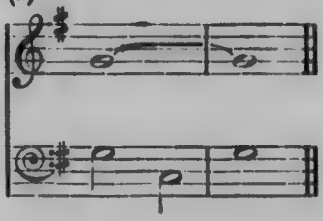
(b)



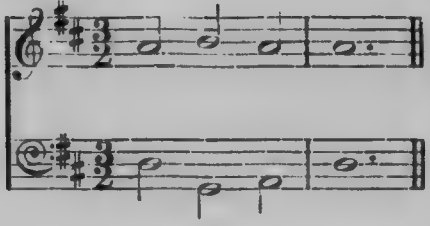
(c)



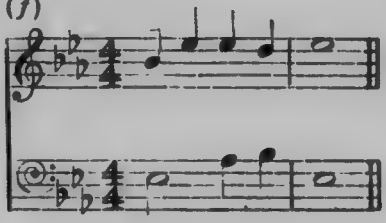
(d)



(e)

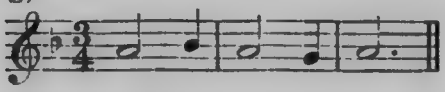


(f)



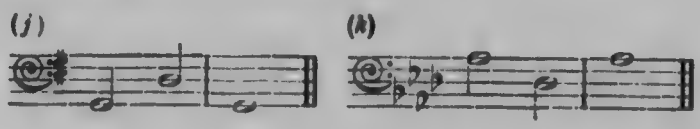
Add alto, tenor, and bass.

(g)



(h)

Add treble, alto, and tenor.



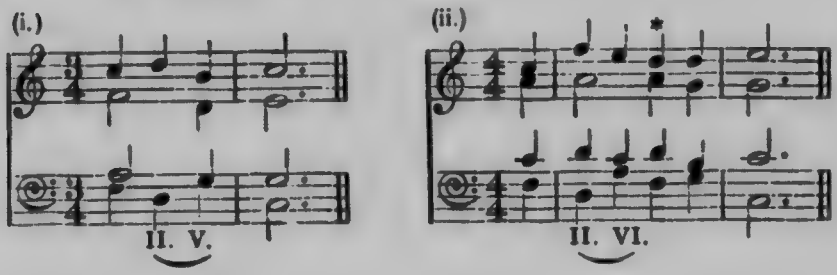
7. Write an example in the key of E, in close position, using tonic and dominant chords.
8. Write an example in the key of A♭, in close position, using tonic and subdominant chords.
9. Write an example in the key of G, in close position, using tonic, subdominant, and dominant chords.

CHAPTER III.

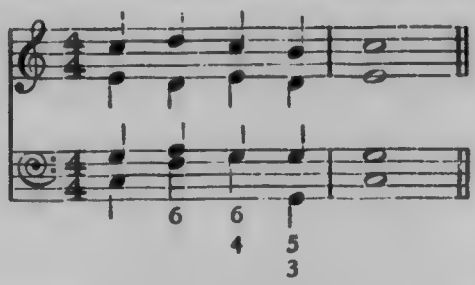
THE SECONDARY TRIADS.

10. As shown in §7 the secondary triads are those built on the 2nd, 3rd, 6th, and 7th degrees of the scale.

11. In a major key the Supertonic triad generally proceeds (i.) to the dominant or (ii.) to the submediant:

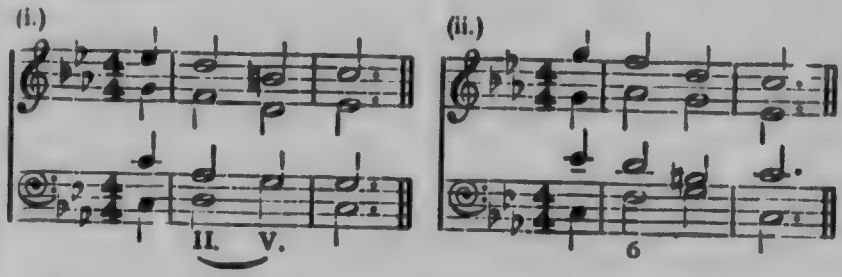


It frequently proceeds to a cadential $\frac{7}{4}$ $\frac{5}{3}$ (*see* §40).



* *First inversion, see* §32.

In a minor key the Supertonic triad is generally followed by the dominant:

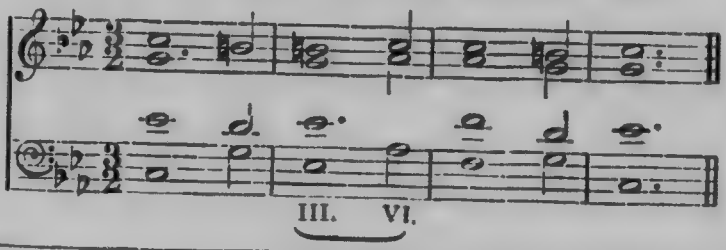


(i.) In such a progression the root* is the best note to double.

(ii.) A first inversion is used here, and the result is more satisfactory.

12. In a major key, the Mediant triad proceeds naturally to the submediant:

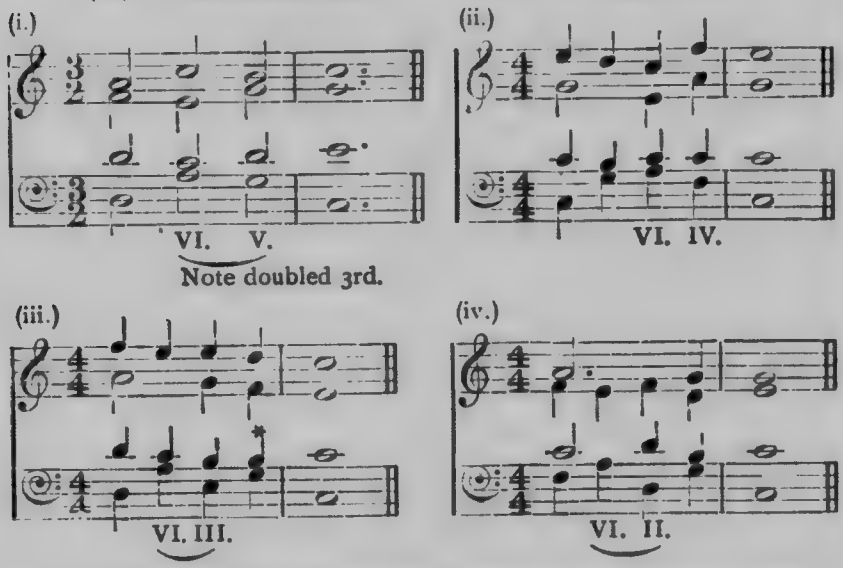
In a minor key, the Mediant triad (which is augmented) can only be resolved satisfactorily on the submediant:



* *See* §15.

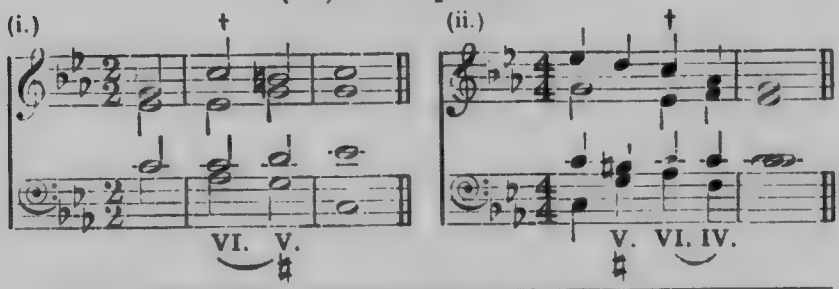
13. In a major key the Submediant triad may be followed by:

(i.) The dominant; (iii.) The mediant;
(ii.) The subdominant; (iv.) The supertonic.



In a minor key the submediant triad may be followed by:

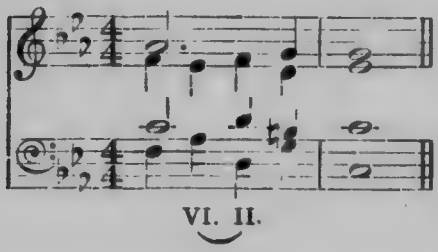
(i.) The dominant; (ii.) The subdominant;
(iii.) The supertonic.



* *See* §46.

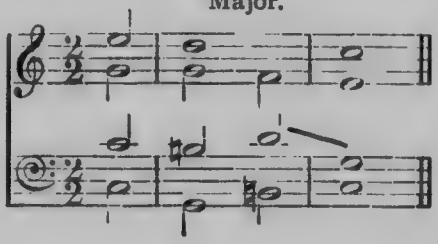
† *Notice the doubled major 3rd. This is necessary when the triad on the submediant is either followed by the triad on the dominant* (i.) *or preceded by it* (ii.).

(iii.)

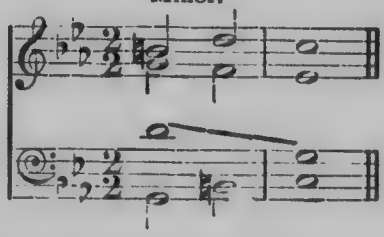


14. In both major and minor keys the triad on the Leading note resolves on to the tonic triad.

Major.

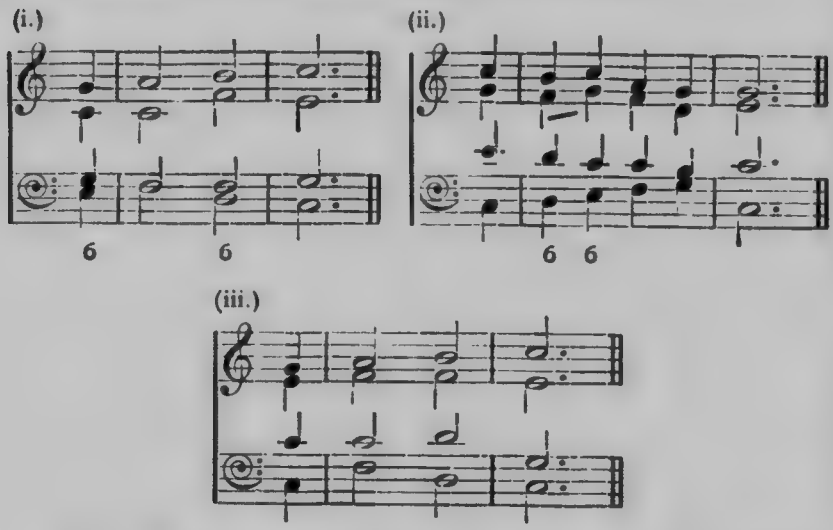


Minor.



(*The root of this triad, being the leading-note, may never be doubled. It is generally looked upon as a first inversion of the chord of the dominant 7th, the root being omitted.*) (*See* §52.)

The triad on the leading-note is more frequently used in its first inversion, and is followed by the tonic chord:



(i.) The 5th of the triad on the leading-note is doubled.

(ii.) The 3rd of the triad on the leading-note is doubled, and the 5th (F) proceeds upwards (*see* §50).

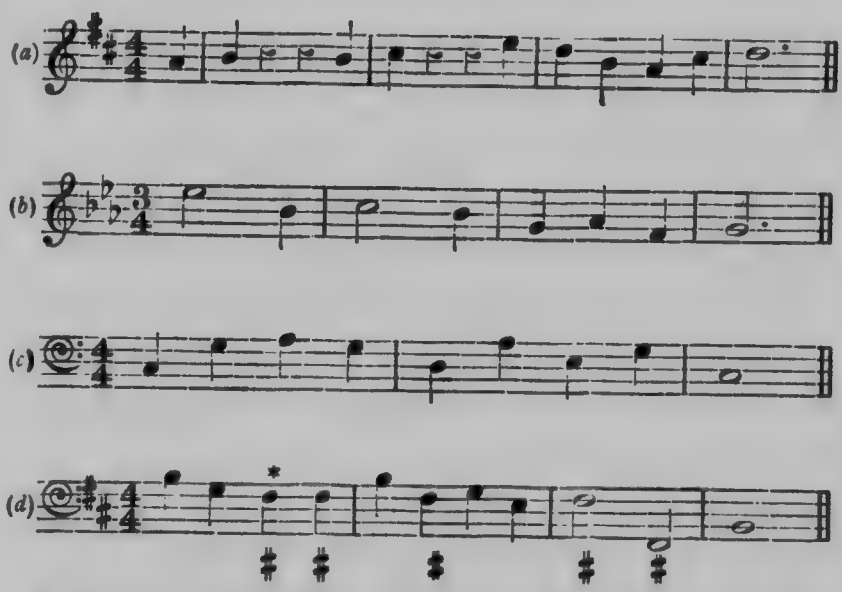
(iii.) The 3rd of the triad is doubled.

There are, of course, other progressions than those given in this chapter to succeed the secondary triads. The student will discover these by experience.

Questions and Exercises on Chapter III.

1. To what chords does the supertonic triad proceed in a major key? Write illustrations in the key of B♭.
2. Write a short passage in the key of A major showing the mediant triad followed by the submediant.
3. Write a short passage in the key of D major showing the submediant triad followed by the dominant.
4. Write a short passage in the key of A minor showing the submediant triad followed by the supertonic.

5. Harmonize the following melodies and basses, using only primary and secondary triads.



6. In four-part writing, which note must be doubled in the submediant triad when it is followed by the dominant? Write an illustration in F minor.

7. Write a short passage in E minor showing the diminished triad resolving on to the tonic.

---

* *An unfigured bass note means that such note will bear a common chord.*

A ♯, ♭, or ♮—without a figure—refers to the 3rd of the chord.

A ♯, ♭, or ♮ placed before a figure refers to the note indicated by the figure.

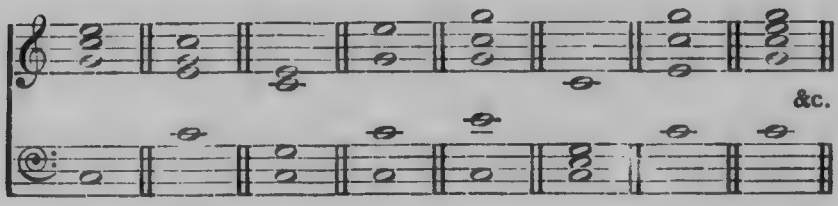
A sharpened note is sometimes indicated by a line drawn through the figure, thus 6̸.

CHAPTER IV.

GENERAL INFORMATION AND ELEMENTARY RULES OF PART-WRITING.

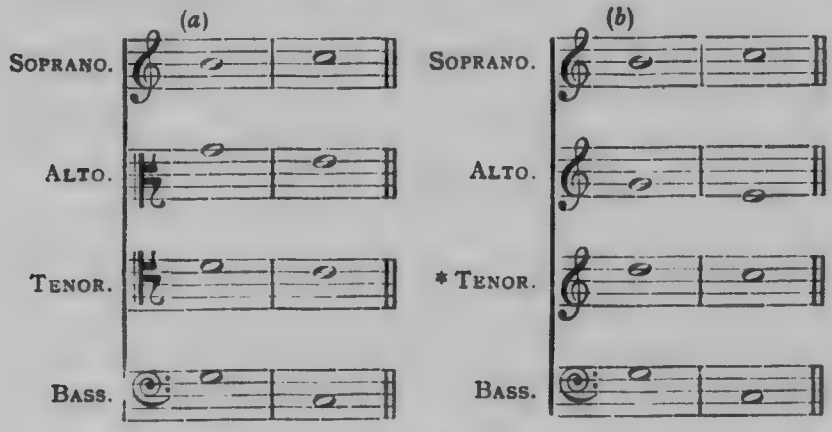
15. A chord is in its root position when its root (*i.e.*, the note from which the chord is derived) is in the lowest part, no matter how the notes above it are arranged.

The root of each of the following chords is C:

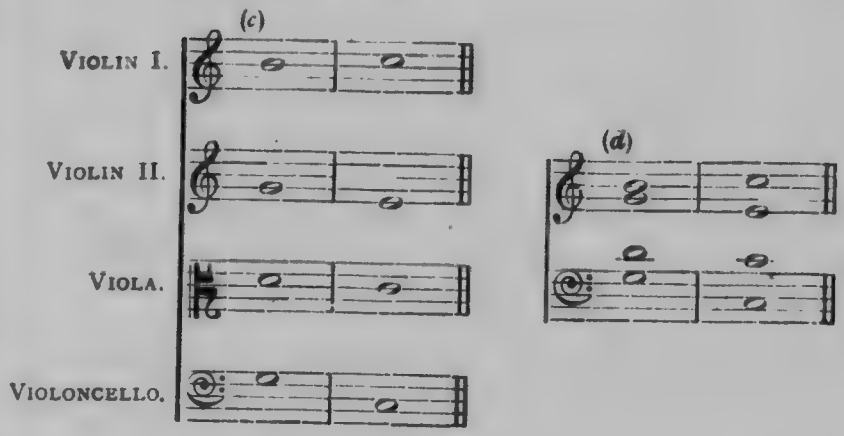


16. Music is said to be written in open score when each voice or part occupies a separate staff.

When only two staves are used, with two or more parts on each, it is said to be in short score:



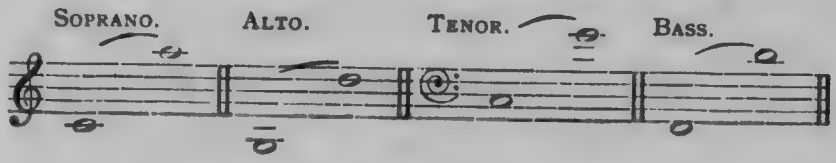
* Sounds an octave lower than written.



(*a*) *Open score, with alto and tenor written in C clefs.*
(*b*) *Open score, as now used.*
(*c*) *Open score for strings.*
(*d*) *Short score.*

When writing for voices in short score, turn the stems of the treble and tenor up and those of the alto and bass down.

In vocal writing keep the parts within the following limits:

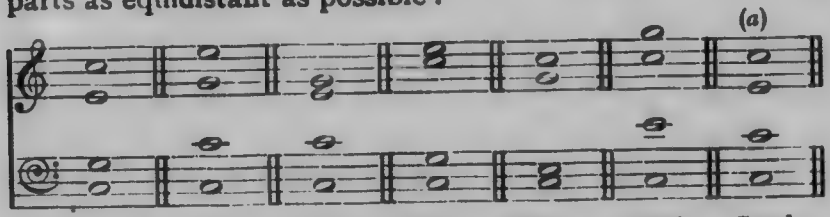


17. It is obvious that as a triad consists of only three notes, one of these must be doubled when writing in four-part harmony.

The 8th, the 5th, or the minor 3rd may be doubled, but it is well, in the early stages, to avoid doubling the major 3rd. (*See*, however, §13.)

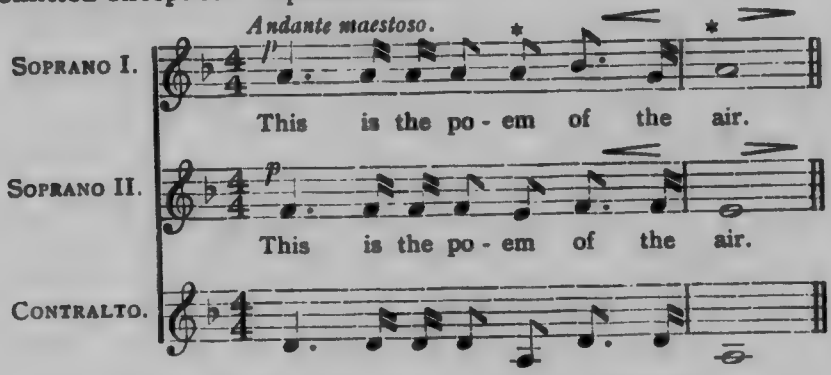
The leading-note should not be doubled, except in a sequence. (*See* §44.)

18. In order to produce the most sonorous effect, keep the parts as equidistant as possible:



Good. Good. Good. Poor. Poor. Good. Good.

A good general rule is to arrange the widest "gap" between the bass and the part next above. The 5th may be omitted when necessary, as at (*a*). The 3rd should not be omitted except for a special effect:



19. Three kinds of Motion are used in harmony:

(*a*) Similar, when the parts move upwards or downwards together;

(*b*) Contrary, when the parts move in opposite directions;

(*c*) Oblique, when one part remains stationary while the others move.

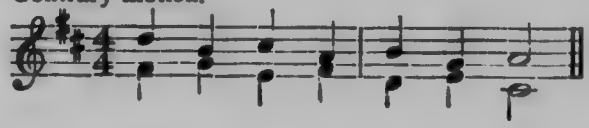
Similar motion.

(*a*)

* *3rd omitted.*

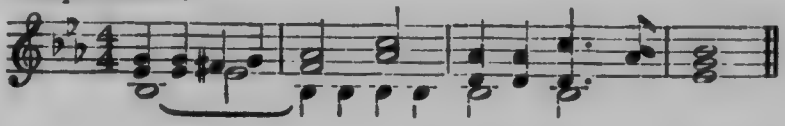
Contrary motion.

(b)

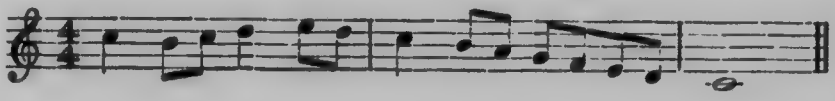


Oblique motion.

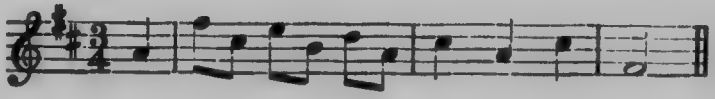
(c)



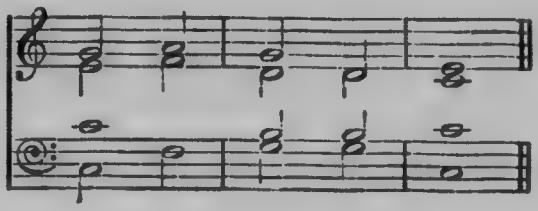
20. When a part proceeds by steps of a 2nd, the movement is Conjunct:



When it proceeds by leaps the movement is Disjunct:



In early exercises it is advisable to let the parts move as conjunctly as possible, and to keep notes which are common to successive chords *in the same part.* Each note of a chord should move to the nearest available note in the succeeding chord:

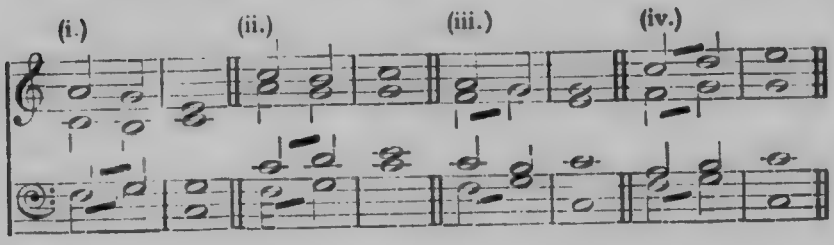


21. The following Consecutives* are forbidden between any two parts:

(*a*) Consecutive unisons;

(*b*) Consecutive 5ths;

(*c*) Consecutive 8ths.



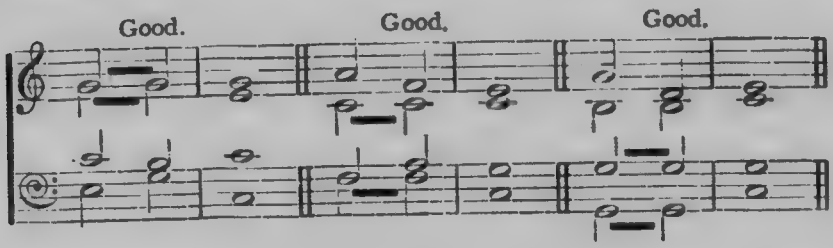
(i.) *Consecutive unisons between tenor and bass.*

(ii.) *Consecutive 5ths between tenor and bass.*

(iii.) *Consecutive 8ths between alto and bass.*

(iv.) *Consecutive 8ths between alto and bass, and 5ths between treble and alto, and treble and bass. Also, it is unwise to allow all the parts to move together in similar motion.*

Repeated unisons, fifths, and octaves are, of course, quite correct:



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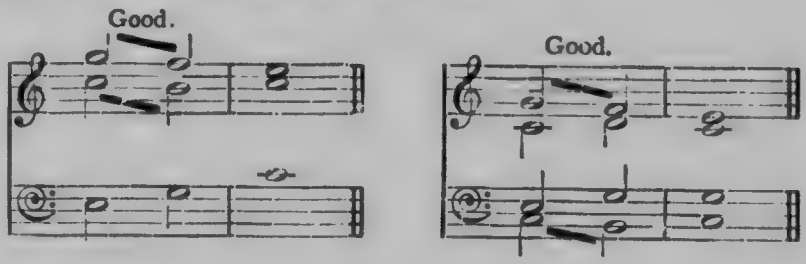
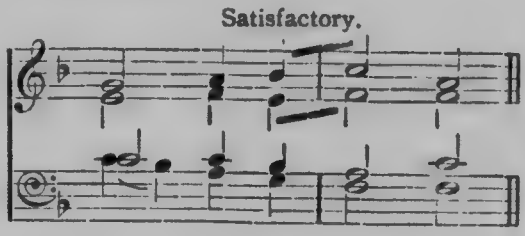
* *Consecutive unisons and 8ths are objectionable because the individuality of one part disappears.*

Consecutive 5ths are objectionable because of the confusion of keys caused by two scales being played or sung together.

22. A diminished 5th following a perfect 5th makes a satisfactory progression in harmony of three or more parts, and is allowed between any two parts:

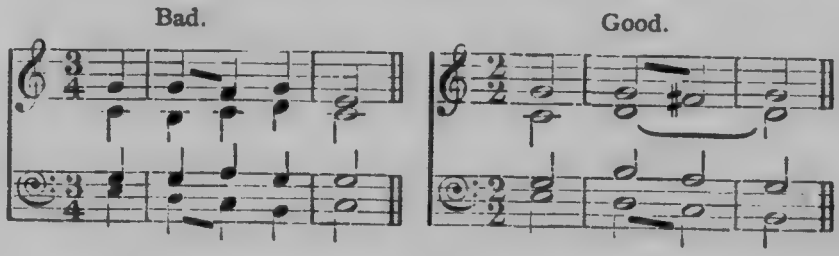


23. A perfect 5th following a diminished 5th is not allowed between the extreme parts, but it is not objectionable when one is an inner part:

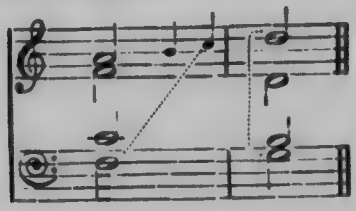


24. No part may proceed in consecutive perfect 4ths with the bass, *or lowest moving part* (*see* §165).

An augmented 4th following a perfect 4th is good:



25. When the extreme (or outside) parts approach a perfect 5th, a perfect 8th, or unison, in similar motion, Hidden Consecutives occur:



[*The small notes are supposed to be filled in mentally.*]

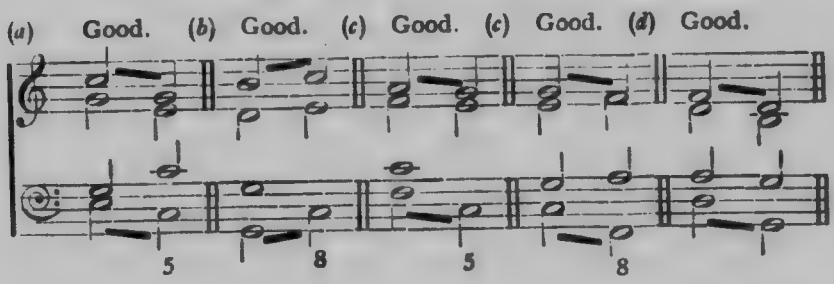
Such progressions must be avoided.
The objection to hidden consecutives disappears:

(i.) When the parts move from one to another position of the same chord (*a*).

(ii.) When the progression is from dominant to tonic harmony and the uppermost part moves by step (*b*).

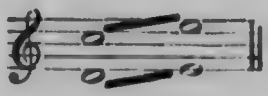
(iii.) When the progression is from subdominant to tonic harmony, or *vice versâ* (*c*).

(iv.) When dominant harmony succeeds supertonic harmony (*d*).



26. In the preliminary exercises no two parts should proceed from a 2nd to a unison : nor

should two notes, next in alphabetical order to each other, proceed in similar motion to an 8th or unison:



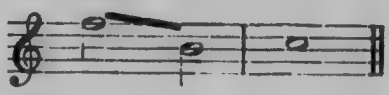
27. No part should contain augmented intervals, except:

(i.) In sequence (*see* §44).

(ii.) When the notes used form part of the harmonic minor scale.

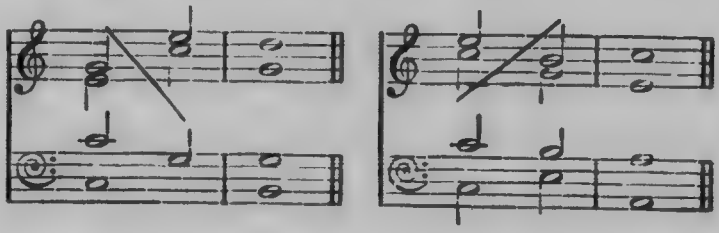
28. Diminished intervals are satisfactory provided a return be made to a note within the compass of such interval:

Good.



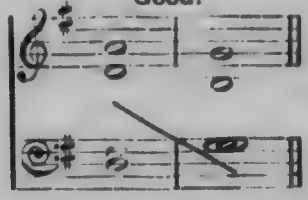
29. Overlapping of parts is forbidden.

(*I.e.* —*When a lower part proceeds to a note above one that has been heard in a higher part, in the preceding chord; or when a higher part proceeds to a note below one that has been heard in a lower part in the preceding chord.*)



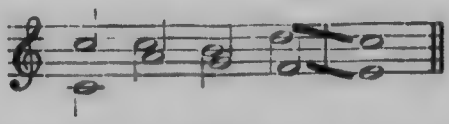
Overlapping is allowable when the progression is from dominant to tonic harmony:

Good.



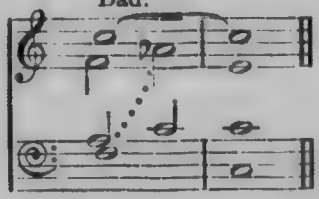
or, when a chord moves from one to another position (*of the same chord*).

30. Crossing of parts is better avoided until the student is well advanced:



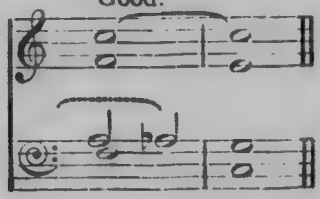
31. When two notes which form a chromatic semitone appear in different parts, in adjacent chords, a "false relation" occurs:

Bad.



Such faulty progressions are avoided by keeping the chromatically altered note *in the same part:*

Good.

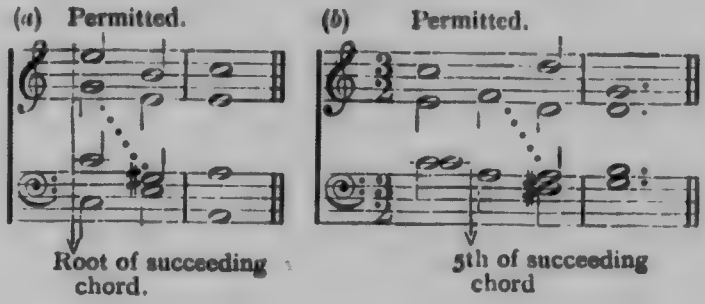


When the 3rd of the first chord is either:

(i.) The root of the second chord (*a*); or

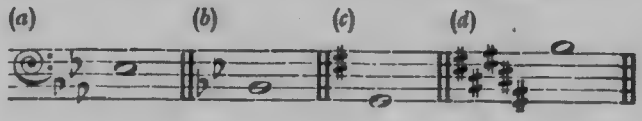
(ii.) The 5th of the second chord (*b*);

the apparent false relation is not objectionable:



Questions and Exercises on Chapter IV.

1. Explain "root position."
2. What is the difference between open score and short score?
3. Which are the best notes to double in a major common chord?
4. Write common chords on the following notes:



5. Explain "contrary" motion. Write an example in the key of A.
6. Define "conjunct" movement.

7. Why are consecutive 5ths and 8ths objectionable?

8. In the key of A♭ write a passage showing how a a diminished 5th may follow a perfect 5th satisfactorily.

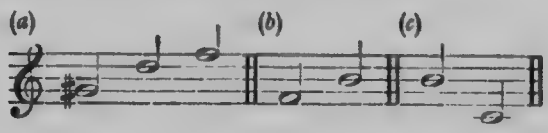
9. What are "hidden" consecutives? Under what conditions may they be correctly used?

10. When is it possible to use augmented or diminished intervals in a melodic phrase?

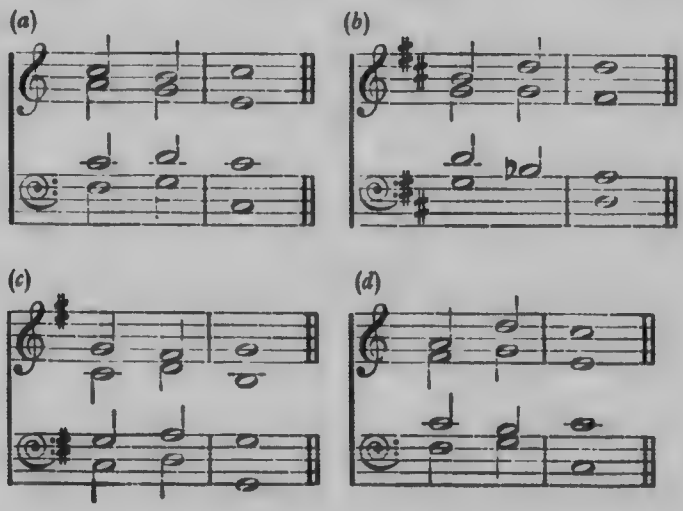
11. What is meant by "overlapping of parts"?

12. Explain "crossing of parts."

13. Name the errors in the following:



14. Name the errors in the following, and correct them:



CHAPTER V.

THE INVERSIONS OF DIATONIC TRIADS.

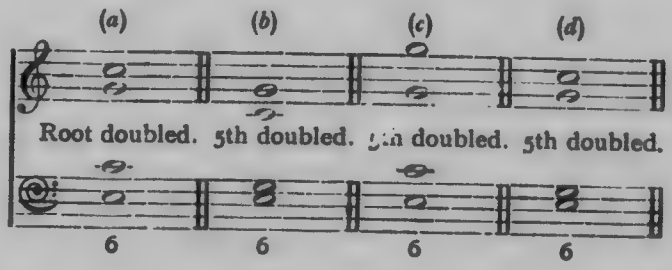
32. The 1st Inversion.

When the 3rd of a triad appears as the bass, or lowest note, such triad becomes a 1st inversion, and is figured 6 or $\frac{6}{3}$.

[*A triad in its original position is usually not figured.*]

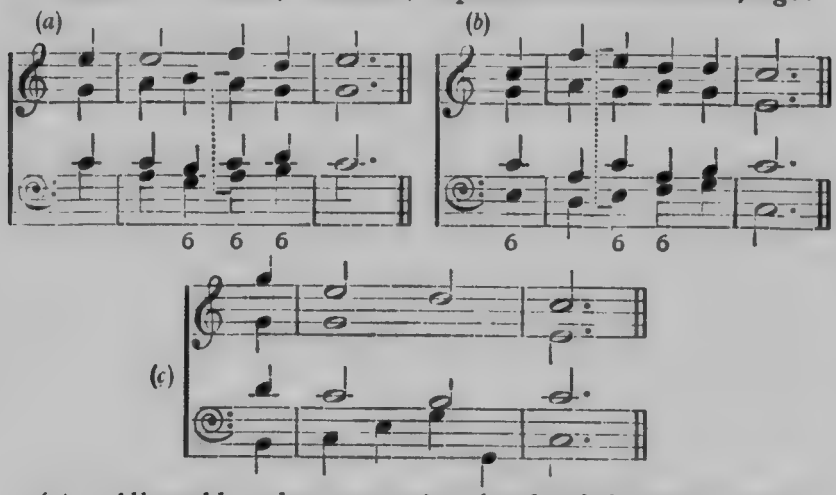
Triad in root position. *Triad in 1st inversion.*

33. The triad still remains in its 1st inversion, no matter what the arrangement of the notes above it may be, so long as the 3rd of the root is in the bass:



34. The chords given in §33 are all well arranged 1st inversions, of which the root is C.

As the bass note (E) is the 3rd of the root it is not advisable to double it. Much, however, depends on the context, *e.g.:*



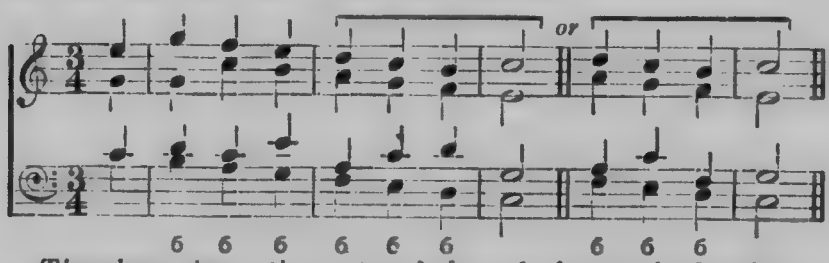
(*a*) *Allowable, when successive chords of the 6th appear on a bass which moves conjunctly.*

(*b*) *Allowable, when the parts which cause the doubling move by contrary motion and conjunct movement.*

(*c*) *Allowable, when one part is sustained while the other moves in arpeggio.*

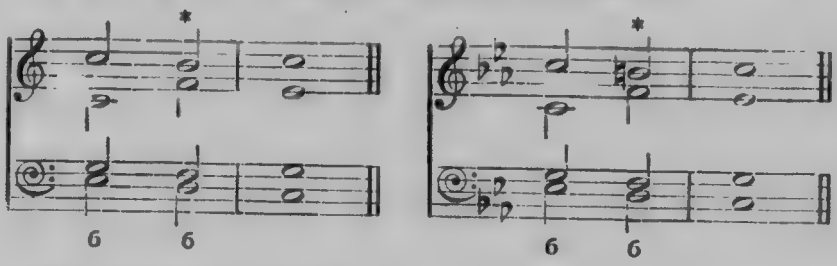
35. When a series of chords of the 6th occurs on successive degrees of the scale, a little care is required, in the placing of the parts, to avoid objectionable consecutive 5ths.

In such cases keep the 6th (*i.e., the root*) in the uppermost part throughout the progression, and alternately double the 5th and the root, or the 3rd and the root:



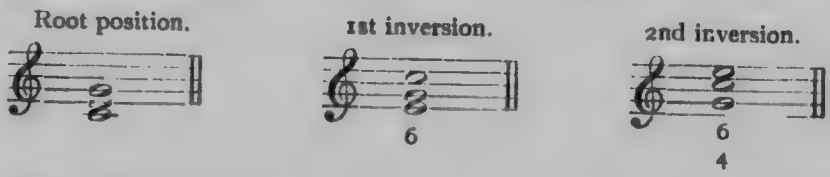
The above shows the root and the 3rd alternately doubled.

36. The 1st inversions of the triad of the leading-note in a major key, and of the supertonic and the leading-note in a minor key, will be found more useful and satisfactory than they were in their original positions (§§11 and 14):

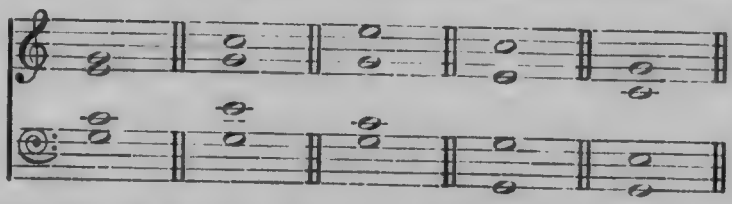


37. The 2nd Inversion.

When the 5th of a triad appears as the bass or lowest part, such triad becomes a 2nd inversion, and is figured $\frac{6}{4}$:



38. The following are all well arranged 2nd inversions:



The root of all the above chords is still C, and it will be noticed that in all cases the bass (*i.e.*, the *5th of the root*) is doubled.

---

* *It will be noticed that the 5th of the root in these inversions of the leading-note—which, of course, is a diminished 5th—is doubled, and that one part ascends and the other descends.*

39. The management of the $\frac{6}{4}$ is somewhat troublesome to beginners, but there need be no difficulty if the following hints are observed:

On approaching a $\frac{6}{4}$.

(i.) Approach the 4th by conjunct movement, if possible, and in contrary motion to the bass (*a*), or prepare the 4th, *i.e.*, sound it *in the same part* in the preceding chord (*b*).

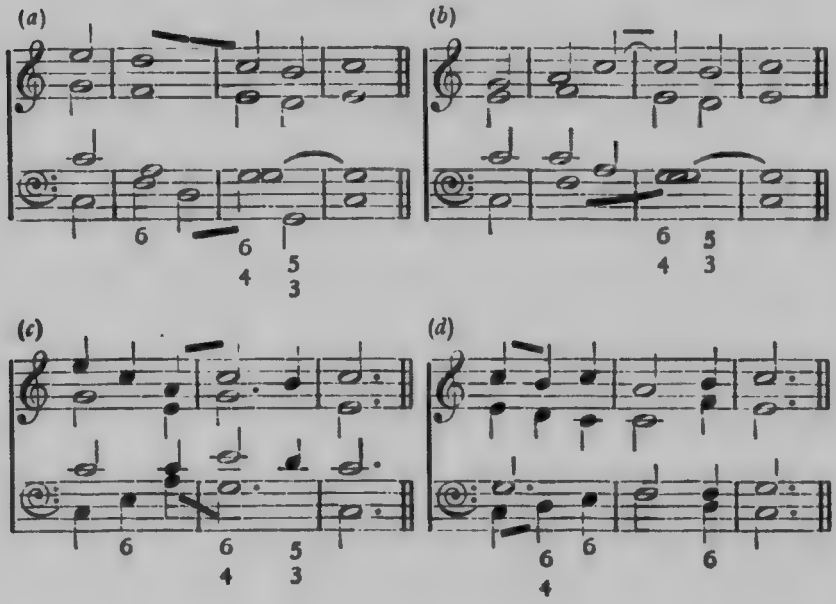
(ii.) If it is necessary to approach the 4th by leap, contrary motion to the bass is advisable (*c*).

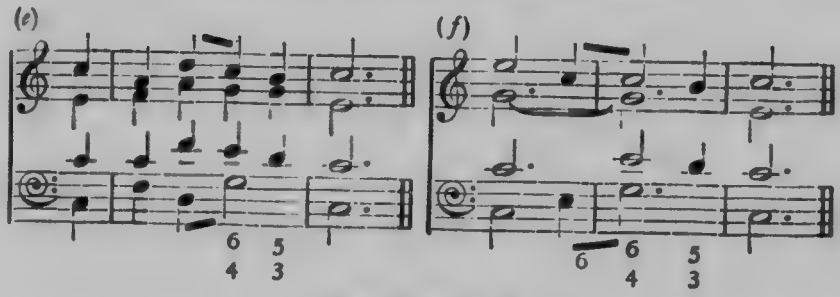
(iii.) The *bass* of a $\frac{6}{4}$ should be approached:

(i.) Conjunctly (*d*); or—

(ii.) By leap *from the root position* (but not from an inversion) of another chord (*e*); or—

(iii.) By leap from an inversion of the same chord (*f*).



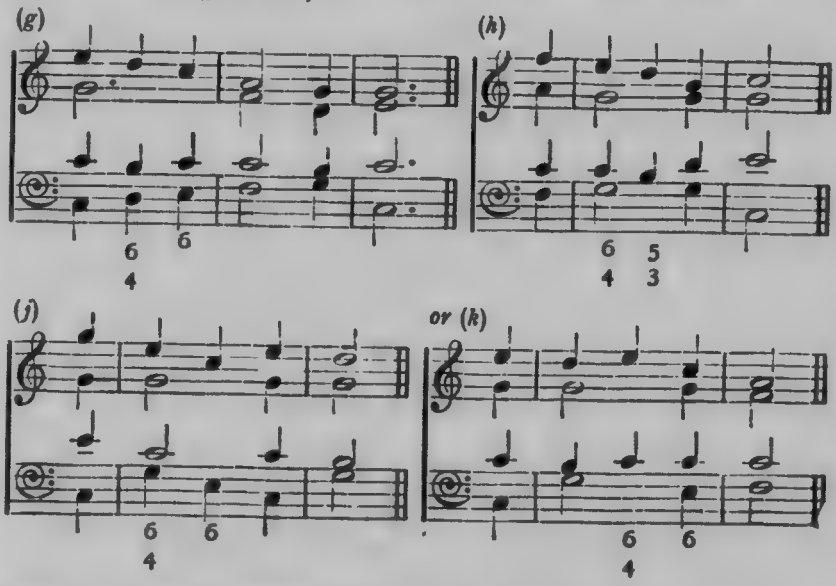


On quitting a $\frac{6}{4}$.

(i.) The *bass* should be quitted conjunctly (*g*); or—

(ii.) Be followed by a $\frac{5}{3}$ on the same bass note (*h*); or—

(iii.) Be followed by an inversion of the same chord (*j* and *k*).



40. When a bass bearing a $\frac{6}{4}$ chord is approached and quitted conjunctly it is called a passing $\frac{6}{4}$ (§39 (*d*) and (*g*)).

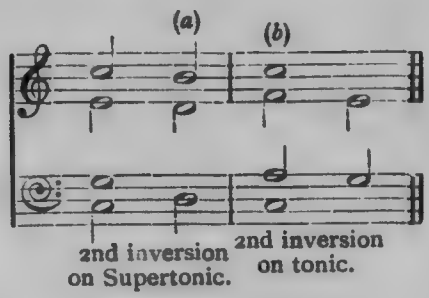
When a $\frac{6}{4}$ is followed by a $\frac{5}{3}$ on the same bass note it is called a cadential $\frac{6}{4}$ (§39 (*a*), (*b*), (*c*), (*e*), (*f*), (*h*)).

In a cadential $\frac{6}{4}$ $\frac{5}{3}$ the $\frac{6}{4}$ should always appear on a stronger beat than the $\frac{5}{3}$. In a passing $\frac{6}{4}$ this need not be considered.

(i.) The passing $\frac{6}{4}$ usually appears on the tonic, supertonic, or dominant.

(ii.) The cadential $\frac{6}{4}$ usually appears on the tonic or dominant.

41. 2nd inversions in succession are to be avoided, but they can be used satisfactorily on the supertonic and tonic:



(*a*) 2nd inversion of the dominant.

(*b*) 2nd inversion of the subdominant.

Questions and Exercises on Chapter V.

1. When is a triad said to be in its 1st inversion?
2. When writing in four parts which are the most suitable notes to double in a 1st inversion?
3. Write out, in four parts, the 1st inversions of which the following are the roots:—A♭, B, F (major keys). Prefix a key-signature in all cases.
4. Write a chord to precede, and one to follow each of the chords given as the answer to question 3.

5. Give the usual figuring for the chord of the 1st inversion.

6. How may consecutives be avoided in a succession of 1st inversions?

7. Write examples of the 1st inversion of the triad on the leading-note in the keys of B♭ major, A minor, D major, and G minor. Precede and follow each with suitable chords.

8. When is a triad said to be in its 2nd inversion?

9. When writing in four parts, which is the most suitable note to double in a 2nd inversion?

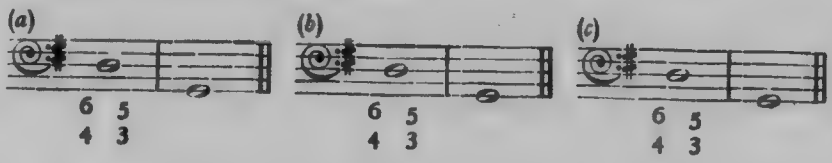
10. Give rules for approaching and quitting the bass note of a 2nd inversion.

11. What is a cadential $\frac{6}{4}$? Write an example in the key of F.

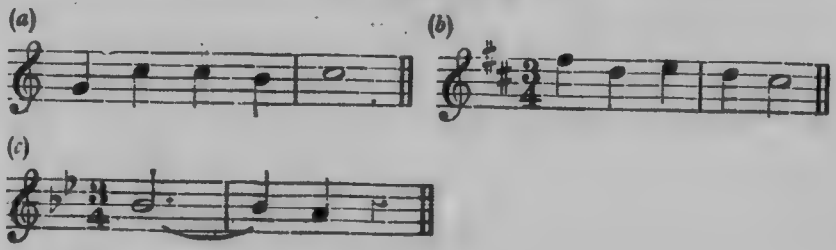
12. What is a passing $\frac{6}{4}$? Write an example in the key of D.

13. Which is the best note to double in a cadential $\frac{6}{4}$?

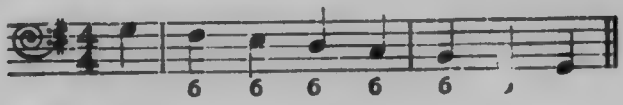
14. Harmonize the following in four parts, showing a different melody in each case:



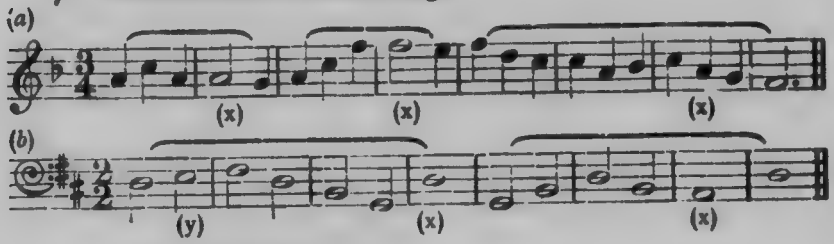
15. Harmonize the following melodic phrases in four parts; in each case introduce a cadential $\frac{6}{4}$ $\frac{5}{3}$:



16. Harmonize the following:



17. Harmonize the following:



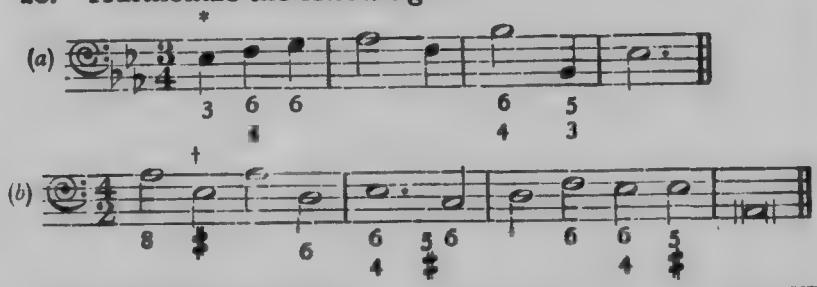
(x) Cadential $\frac{6}{4}$.

(y) Passing $\frac{6}{4}$.

18. Write an illustration, in the key of A, showing a $\frac{6}{4}$ approached by leap.

19. *A $\frac{6}{4}$ should not be approached by leap from an inversion.* Write an example, showing an exception to this rule, in the key of B♭.

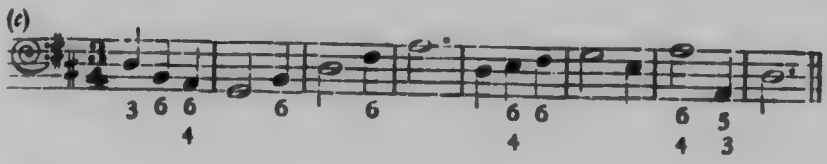
20. Harmonize the following:



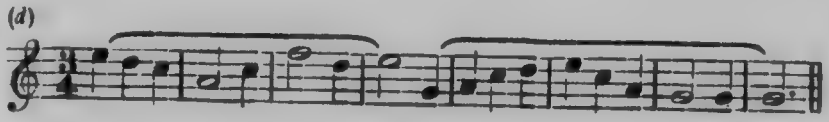
* *When 8, 5, or 3 appears under the first note in a figured bass, it indicates that the treble part will begin with the 8th, the 5th, or the 3rd, according to the figure.*

† *A ♯ or ♭ written under a note implies that the 3rd of the chord will be sharpened or flattened as the case may be. If placed before a figure, the note represented by such figure will be altered accordingly.*

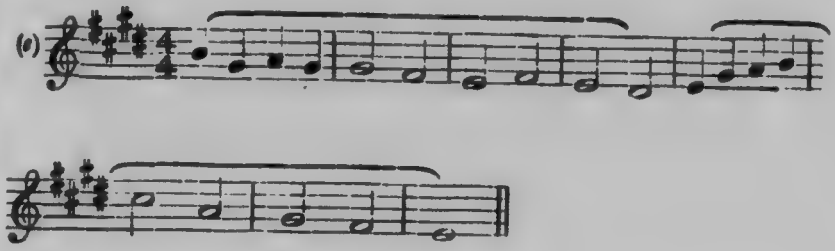
(c)



(d)



(e)



(f)

Treat this note as the supertonic, and harmonize it with a first inversion of that chord.

CHAPTER VI.

SEQUENCES.

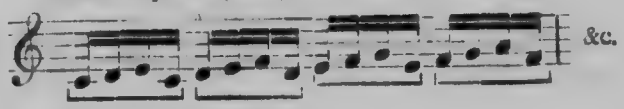
42. A Sequence is the repetition of a melodic or harmonic passage at a different pitch.

(i.) It is a Melodic sequence when the repeated phrase consists of single notes (*a*);

(ii.) It is a Harmonic sequence when the repeated phrase consists of complete harmony (*b*):

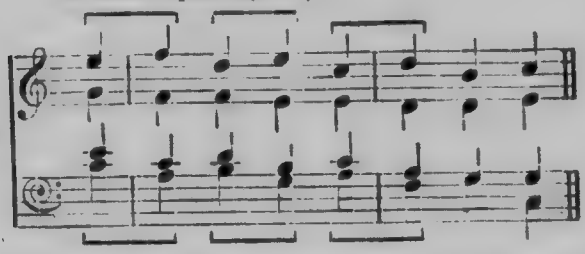
Melodic sequence (tonal).

(*a*)



Harmonic sequence (tonal).

(*b*)



43. There are two kinds of sequence, Real and Tonal.

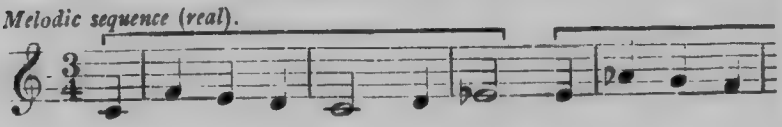
(i.) A sequence is *real* when the intervals of the "pattern" are exactly reproduced on each repetition.

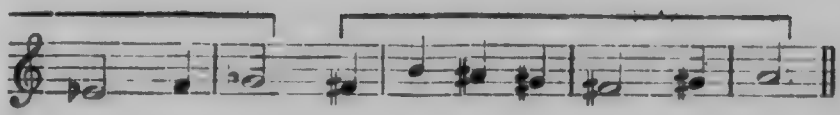
[This, of course, entails modulation at each recurrence of the "pattern" (*c*) and (*d*).]

(ii.) A sequence is *tonal* when the intervals, on each repetition, are not exact, but become major or minor according to the key. (*See* §42, (*a*) and (*b*).)

Melodic sequence (real).

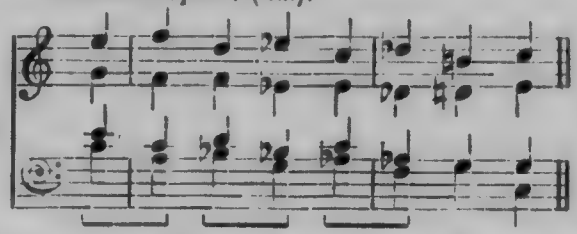
(*c*)





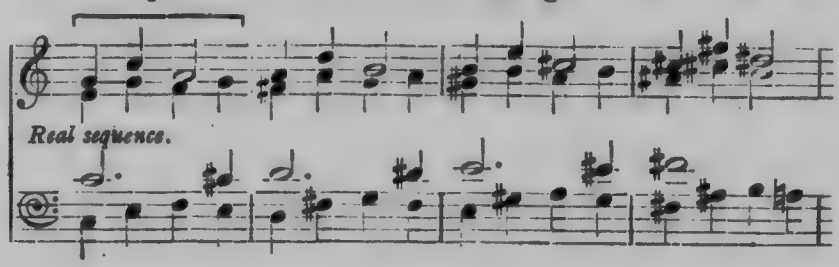
Harmonic sequence (real).

(*d*)

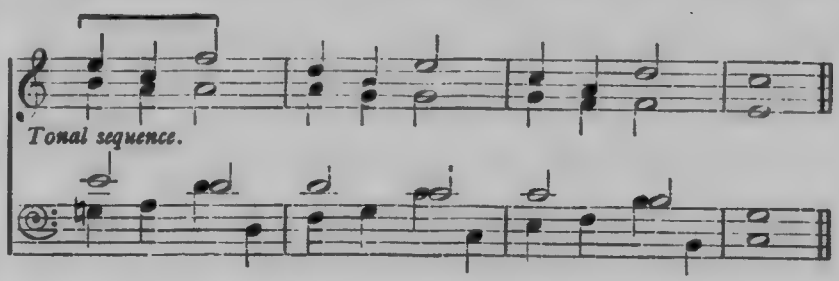


44. In a sequential passage the laws of part-writing should be carefully observed in the "pattern," but in the repetitions greater freedom is allowed. Thus, to preserve the sequence (i.) the leading-note may be doubled, (ii.) augmented intervals may occur, and (iii.) the dissonant triads may be freely used.

45. The following 8-bar phrase (two sections of four bars each) shows a real sequence of four bars ascending, and a tonal sequence of four bars descending:



Real sequence.

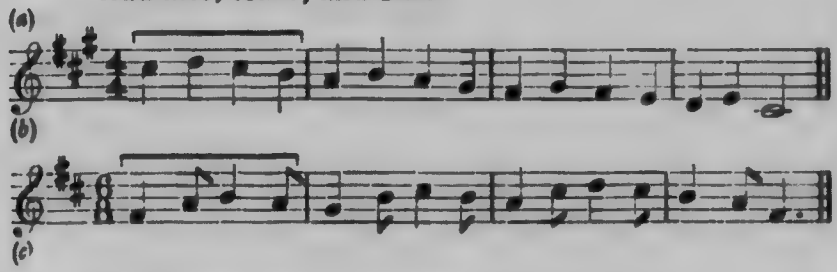


Tonal sequence.

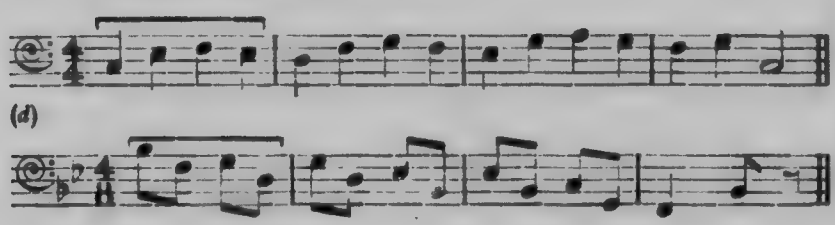
Questions and Exercises on Chapter VI.

1. What is a sequence?
2. In what way does a real sequence differ from a tonal?
3. What licences are permitted in passages of a sequential character?
4. Write a short tonal harmonic sequence in the key of D.
5. Write a short real harmonic sequence in the key of F.
6. Harmonize the following tonal harmonic sequences:

Add alto, tenor, and bass.



Add treble, alto, and tenor.



CHAPTER VII.

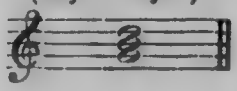
THE DOMINANT SEVENTH.

46. The chord of the dominant 7th is the most important of what are known as the fundamental discords.

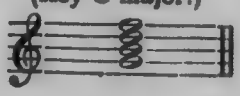
[*Fundamental discords are derived from either tonic, supertonic, or dominant roots, and do not require preparation.**]

It is formed by adding the minor 7th to the major triad on the dominant, and is the same in both major and minor keys:

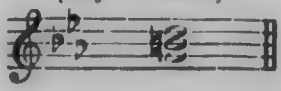
Major triad on Dominant.
(Key C major.)



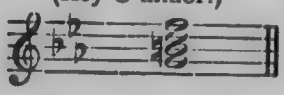
Dominant 7th.
(Key C major.)



Major triad on Dominant.
(Key C minor.)



Dominant 7th.
(Key C minor.)



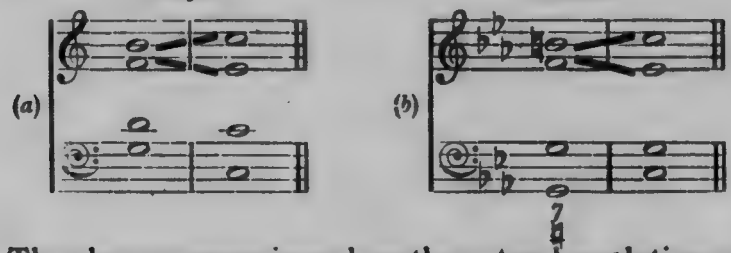
47. Although the dominant 7th does not require preparation (*see* §39 (i.)), being a dissonant note it must be resolved, *i.e.*, it must proceed to a consonant note in a succeeding chord. This it usually does by falling one degree, except:

(i.) When it is an inversion (*see* §50 (*c*)); or—
(ii.) When it proceeds chromatically (*see* §132).

* *See* §39 (i.).

The 3rd of the chord, being the leading-note of the key, ascends one degree to the tonic:

C major. C minor.

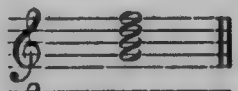


The above progressions show the natural resolutions of the chord of the dominant 7th on to the chord of the tonic.

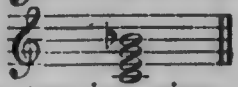
It will be observed that the two most important notes of the chord of the dominant 7th are the 3rd and the 7th (in this case F and B). These are the characteristic notes and decide the key: the context will decide whether such key is major or minor.

Note the difference between a dominant 7th *in* a key, and *on* a note.

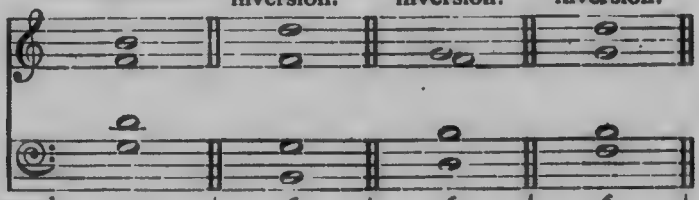
A dominant 7th *in the key of C* will be:



A dominant 7th *on C* (*i.e.*, key F) will be:

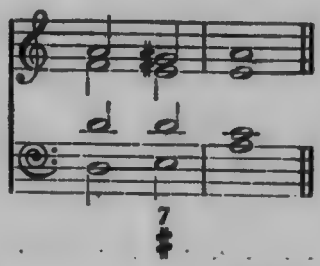


48. As a triad, having three notes, has two inversions, so a dominant 7th, having four notes, has three inversions, *e.g.*:



	Root position.	1st inversion.	2nd inversion.	3rd inversion.
Figured:	7 5 3	6 5 3	6 4 3	6 4 2
Or More usually:	7	6 5	4 3	4 2

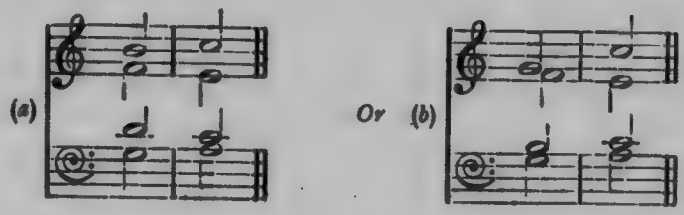
If accidentals are required they must be indicated by the figuring, *e.g.*:



49. As shown above (*see* §47 (*a*) and (*b*)), the most usual resolution of the chord of the dominant 7th is on to the tonic chord. When this is the case the 5th is often omitted, and the root doubled, so that it may resolve on to a complete tonic chord.

[*See example* (*a*) §47, *where the 5th is included in the chord of the 7th, and the chord of resolution is incomplete*, i.e., *without its 5th*; *also, at* (*b*) §47, *the 5th is omitted and a complete tonic chord follows.*]

The chord of the submediant frequently follows the chord of the dominant 7th:



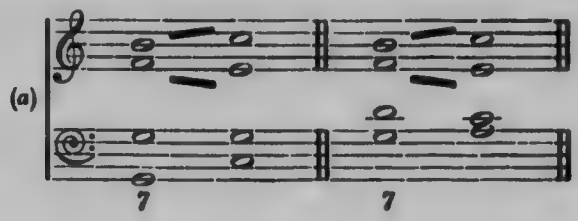
(*a*) The dominant chord is complete.

(*b*) The 5th is omitted, and the root doubled.

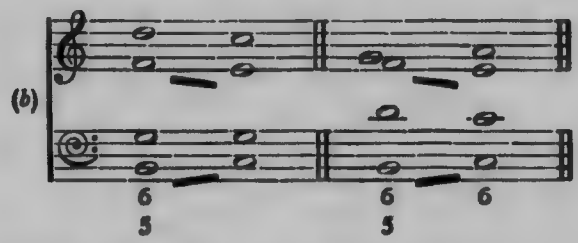
To avoid an ungrammatical progression the upper G leaps a 4th upwards on to the 3rd of the submediant.

50. The definite rules for the progression of the 3rd and the 7th, in the root position of a chord of the dominant 7th, apply also to these notes in the inversions.

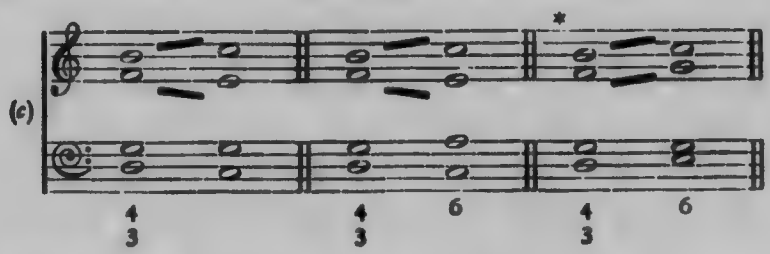
Resolutions of dominant 7th, in root position:



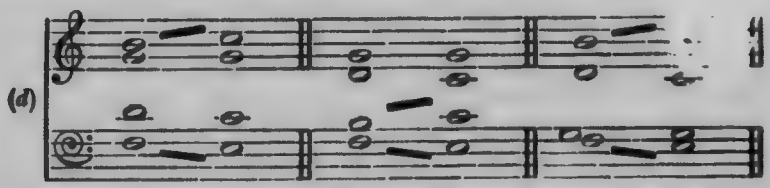
Resolutions of dominant 7th, in 1st inversion:



Resolutions of dominant 7th, in 2nd inversion:



Resolutions of dominant 7th, in 3rd inversion:



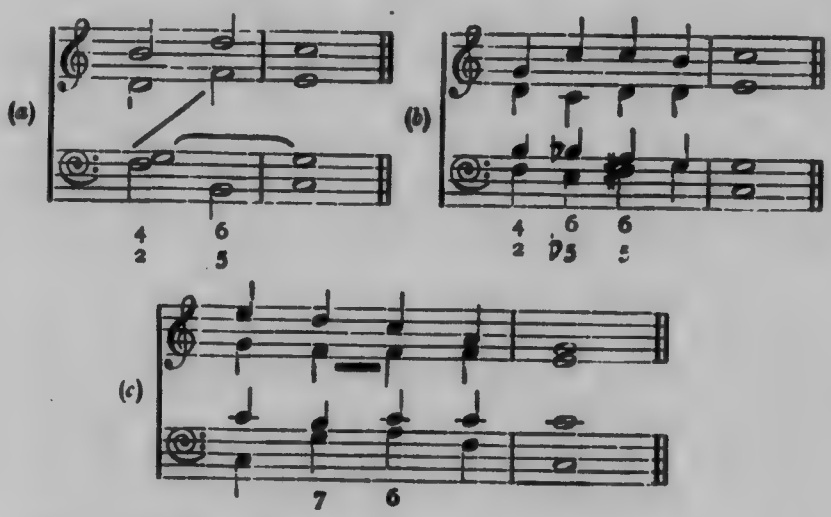
** When the bass of a 2nd inversion of a dominant 7th rises one degree the 7th may move in similar motion with it.*

51. Before finally resolving, the chord of the dominant 7th or other discord may

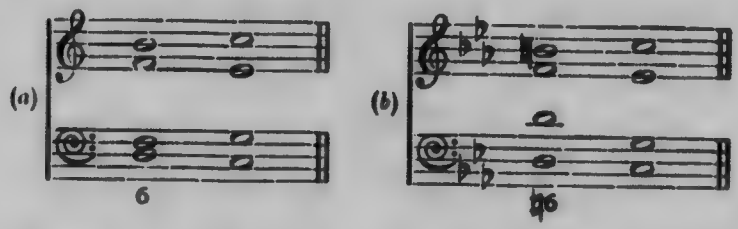
(i.) Move to another position of the same chord (*a*);

(ii.) Resolve on to another discord, which, in its turn, may be similarly treated (*b*); or

(iii.) The 7th may remain to form a consonant note in a new chord (*c*):

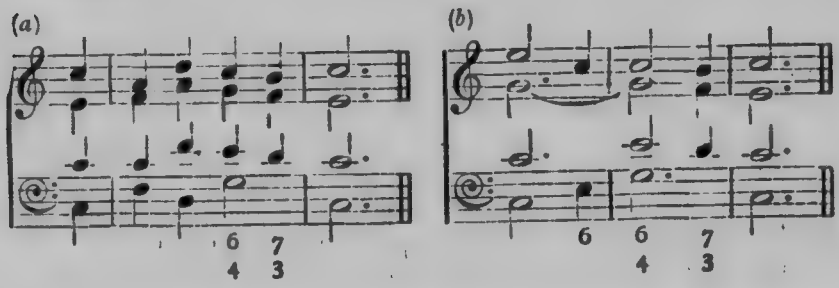


52. When the root is omitted, as it frequently is, in the 2nd inversion of a dominant 7th, either the 5th or the 7th of the root will be doubled:

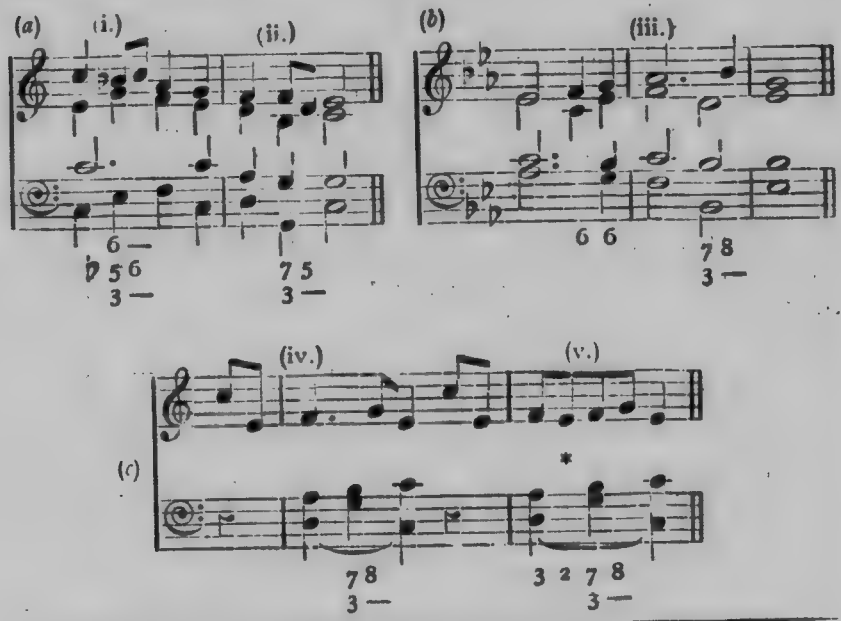


It will be seen (§36) that the above are merely 1st inversions of the diminished triad on the leading-note.

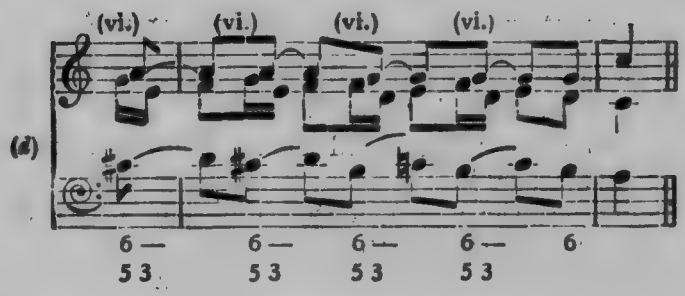
53. The 7th is frequently added to the dominant chord in a cadential $\frac{6}{4}$ $\frac{5}{3}$. Compare §39 (*e*) and (*f*) with the following:



54. The following examples show ornamental resolutions of the 7th, *i.e.*, before resolving the 7th moves to another note of the chord:



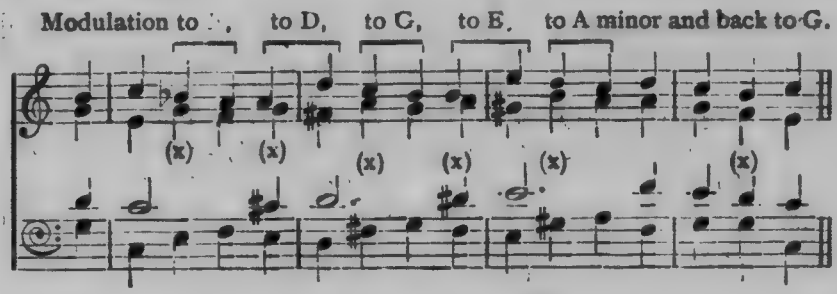
* Passing-note (*see* §74).



(i.) The 7th moves to the root before resolving.
(ii.) " " " 5th " "
(iii.) " " " root " "
(iv.) " " " " " "
(v.) " " " " " "
(vi.) " " " 5th " "

[*A line placed after a figure, as in the above examples, indicates that the note represented by the figure is to be sustained or repeated for the duration of the line.*]

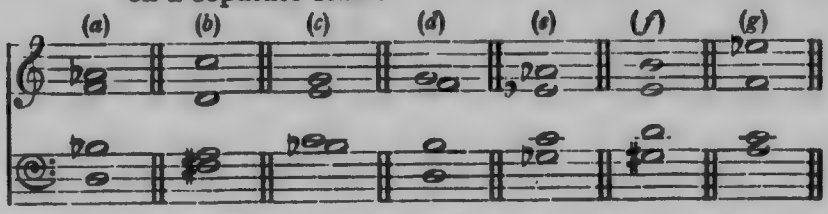
55. Since the chord of the dominant 7th contains the two characteristic notes of its key, it provides a simple means of modulation (*see* Chap. IX.). The following sequential passage illustrates this :



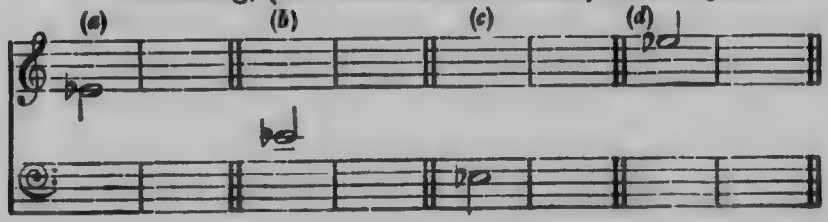
(x) At these points the modulatory chord contains the characteristic notes *of the new key*.

Questions and Exercises on Chapter VII.

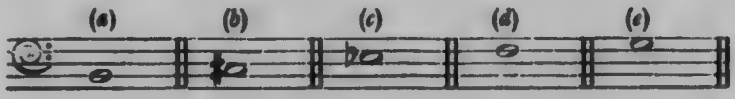
1. How is the chord of the dominant 7th formed?
2. How should the dissonant note resolve?
3. Which note of the chord of the dominant 7th should always rise?
4. Write out the chord of the dominant 7th in the key of B♭ and resolve it.
5. Write out the chord of the dominant 7th on B♭, and resolve it.
6. Give the figuring of the various inversions of the chord of the dominant 7th.
7. Upon which degree of the scale, other than the tonic, does the chord of the dominant 7th frequently resolve? Write an illustration in the key of A.
8. In the key of A♭ major, write out all the inversions of the chord of the dominant 7th and give a resolution of each. Figure the bass in all cases.
9. In which inversion may the 7th rise, and under what condition? Give an example in the key of F.
10. Resolve the following chords, and give the root of each on a separate staff:



11. Treating E♭ as the 7th of the root, harmonize the following, (and resolve each chord) in four parts:



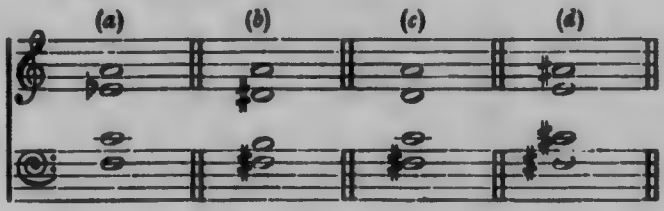
12. On the following roots write chords of the dominant 7th, show all the inversions, and resolve each chord into major and minor keys. Give key-signatures and figure the bass:



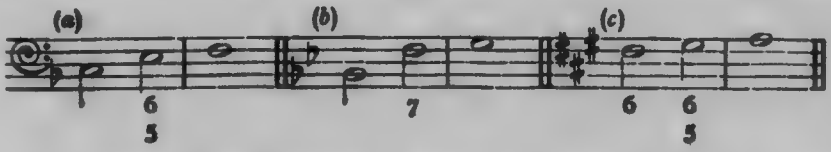
13. Explain "ornamental resolution." Write an illustration of your answer in the key of D.

14. Which note should be doubled and which omitted in the root position of a dominant 7th, when it is to be followed by a complete tonic chord? Illustrate your answer in the key of A♭.

15. Figure the following chords, give the root and the key of each, and resolve them:



16. Harmonize the following, in accordance with the figures:



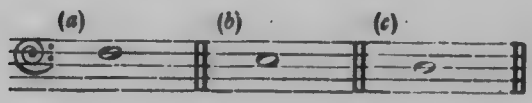
17. Taking the following notes as basses, add to each chords which will form:

(i.) A dominant 7th.

(ii.) A 1st inversion of a dominant 7th.

(iii.) A 2nd inversion of a dominant 7th.

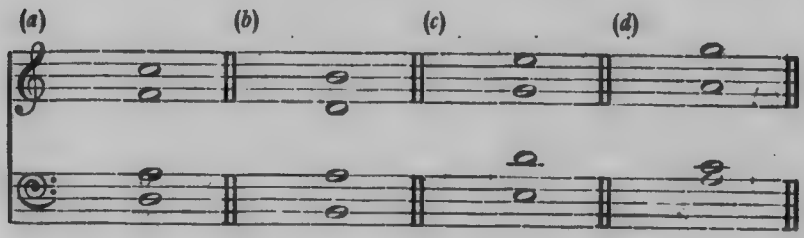
(iv.) A 3rd inversion of a dominant 7th.



Write a chord to precede and one to follow each chord, figure the bass and write the roots on a separate staff.

18. When the root is omitted in the 2nd inversion of the dominant 7th, which note should be doubled? Write examples in the key of A.

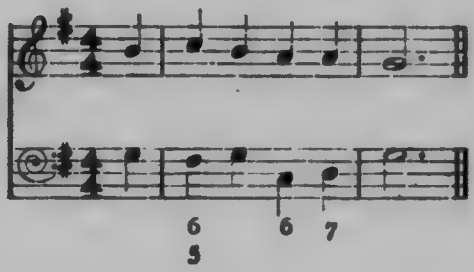
19. Add an accidental to each of the following chords, so as to convert it into a chord of the dominant 7th. Resolve each on to a minor common chord. Figure the bass and give the key-signature of each:



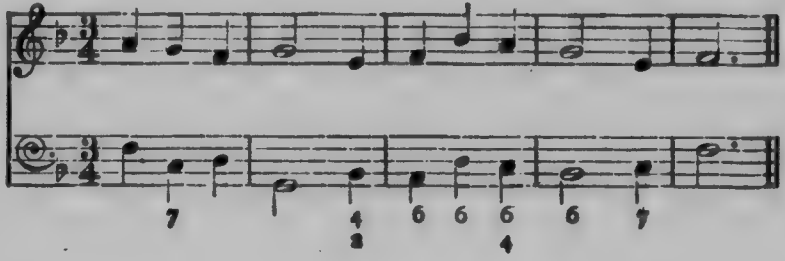
20. Harmonize the following in four parts. Indicate the roots on a separate staff:

(i.) *Add Alto and Tenor:*

(a)

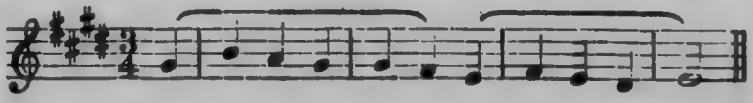


(b)

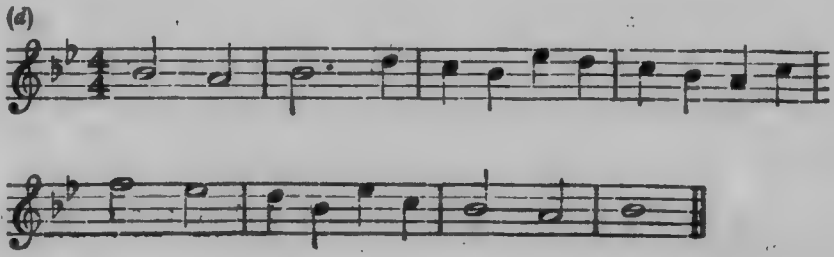


(ii.) *Add Alto, Tenor, and Bass, and figure the result:*

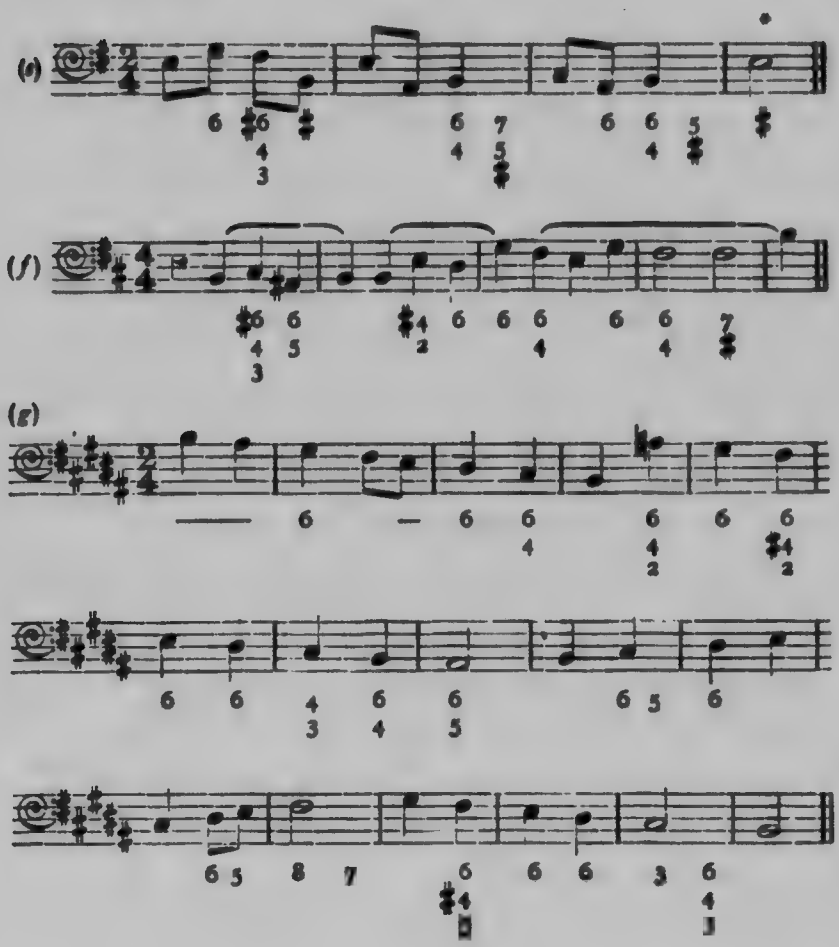
(c)



(d)



(iii.) *Add Treble, Alto, and Tenor in accordance with the figures:*



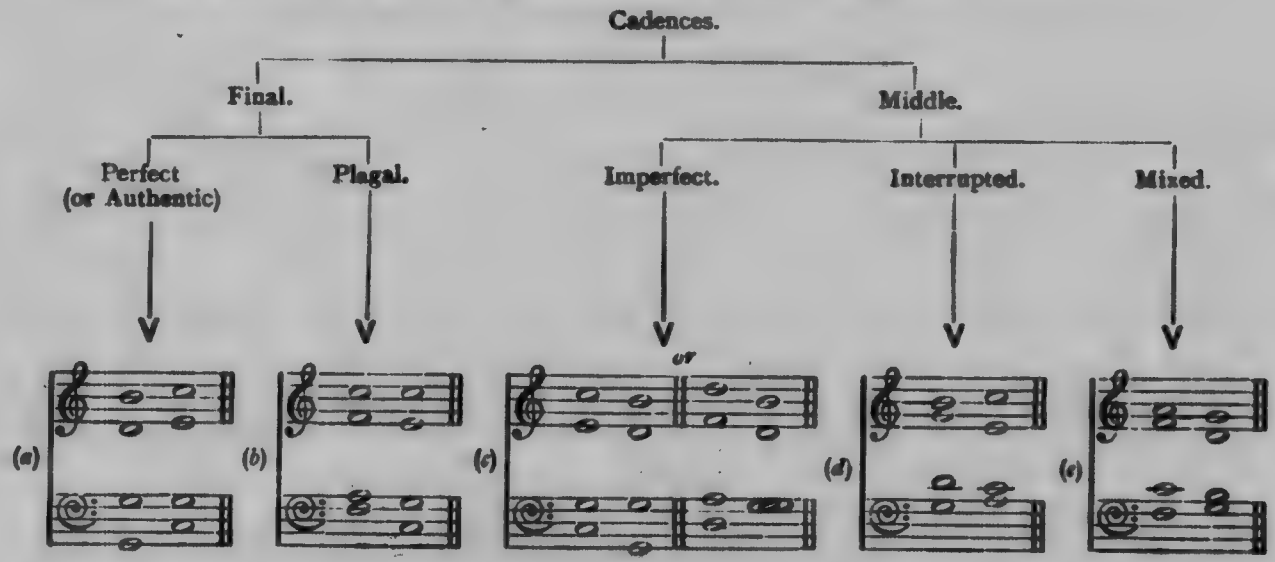
* When a major 3rd is introduced into the final chord of a piece in a minor key, it is called a *Tierce de Picardie.*

CHAPTER VIII.

CADENCES.

56. The final harmonies of a musical phrase or sentence are called Cadences.

57. The following shows the Cadences most usually met with:



(*a.*) In a *perfect* cadence the progression is from Dominant to Tonic.

(*b.*) In a *plagal* cadence the progression is from Subdominant to Tonic.

(*c.*) In an *imperfect* cadence the progression is from Tonic to Dominant* (or from Supertonic to Dominant).

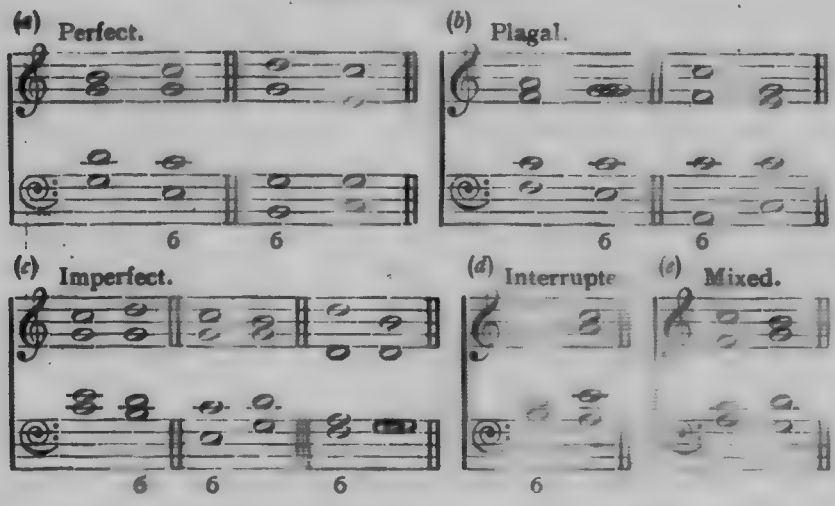
(*d.*) In an *interrupted* cadence the progression is from Dominant to Submediant.†

(*e.*) In a *mixed* cadence the progression is from Subdominant to Dominant.‡

58. When either of the two chords which form a cadence is used in its 1st inversion the cadence is termed "inverted."

Compare the following with the illustrations given above. (*See* §57.)

Inverted Cadences.



* *The opposite of the perfect cadence.*

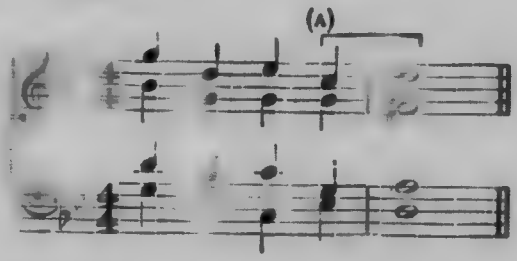
† *Or to some chord other than the tonic.*

‡ *A mixture of the plagal and authentic cadences.*

59. Other Cadences are (i.) The Phrygian, and (ii.) The Pathetic.

(i.) The Phrygian Cadence is usually found in minor keys, and is merely the inverted form (§58) of the mixed cadence (§58 (*e*)).

Example in G minor:



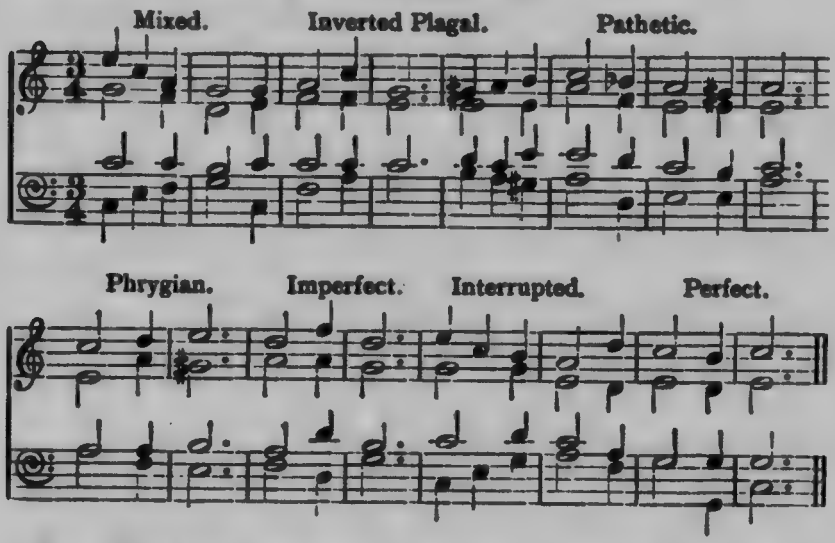
(A) *First inversion of Subdominant followed by Dominant.*

(ii.) The Pathetic Cadence cons of the 1st inversion of the major triad on tened supertonic followed by dominant and rmonies.

Example in C minor:

* *Commonly called a Neapolitan 6th.*

60. The following short passage illustrates all the cadences explained in this chapter:



61. The final chord of a cadence generally appears on the strong beat of a bar. When it occurs on a weak beat the phrase is said to have a feminine ending.

The perfect cadence should be sparingly used until the end of a piece on account of the impression of finality which it conveys, particularly when the root of the final chord is in the upper part.

Questions and Exercises on Chapter VIII.

1. What is a "feminine" ending?
2. Name the principal cadences.
3. What is a Phrygian cadence?

   To illustrate your answer, write two bars in the key of D minor in triple time.
4. Write a 4-bar phrase in the key of F minor, introducing a pathetic cadence, in triple time.

5. Write illustrations of the following:

   (*a*) A plagal cadence in the key of B minor.

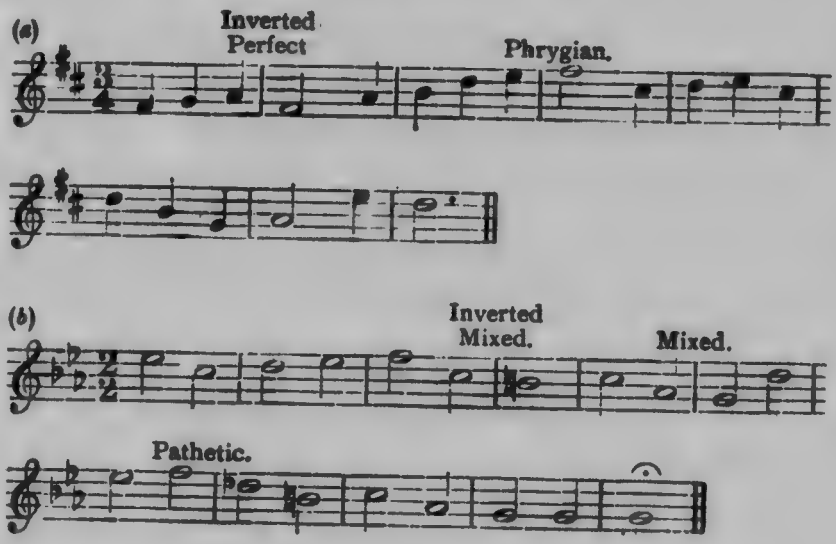
   (*b*) An inverted mixed cadence in the key of A♭ major.

   (*c*) An imperfect cadence in the key of D major.

   (*d*) An inverted interrupted cadence in the key of E major.

6. Write a passage of eight bars. At the fourth bar introduce an interrupted cadence and end with a plagal cadence (key of B♭ major).

7. Add alto, tenor, and bass to the following, introducing the cadences named. Use the Tierce de Picardie at the end of the second melody:



CHAPTER IX.

MODULATION (PART I.).

62. Modulation or transition is the passing from one key to another by means of the characteristic notes of the key to which modulation is made (*see* §47).

[In this it differs from mere "change of key."]

63. Modulation may be:

(i.) Natural (or diatonic).
(ii.) Extraneous (or chromatic).
(iii.) Enharmonic.

(i.) Natural modulation consists in passing from a given key to one of its five related or attendant keys.

These related keys are:

In a major key.

(*a*) The Relative minor.
(*b*) The Dominant.
(*c*) The Relative minor of the dominant.
(*d*) The Subdominant.
(*e*) The Relative minor of the Subdominant.

Five related keys of C major.

(*a*) A minor.
(*b*) G major.
(*c*) E minor.
(*d*) F major.
(*e*) D minor.

In a minor key.

(*a*) The Relative major.
(*b*) The Dominant.
(*c*) The Relative major of the dominant.
(*d*) The Subdominant.
(*e*) The Relative major of the Subdominant.

Five related keys of C minor.

(*a*) E♭ major.
(*b*) G minor.
(*c*) B♭ major.
(*d*) F minor.
(*e*) A♭ major.

(ii.) Extraneous modulation consists in passing to another than the five related keys (Chapter XX.).

(iii.) Enharmonic modulation consists in passing to a new key by means of the enharmonic change of one or more notes of the chord (Chapter XX.).

64. Natural Modulation.

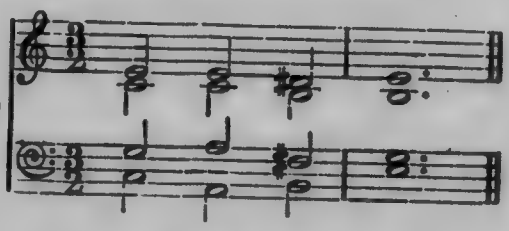
In order to make a modulation to one of the related keys some form of dominant harmony *of the new key* must be introduced. This chord of modulation is usually the dominant 7th or one of its inversions.

65. Modulation is gradual when this dominant chord is preceded by a chord which is common to both the quitted key and to the new key (*a*).

When the dominant chord is preceded by a chord which belongs to the quitted key only, the modulation is sudden (*b*).

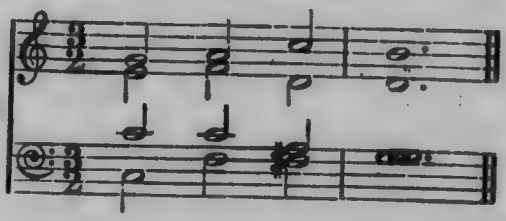
Gradual modulation from C to E minor:

(*a*)



Sudden modulation from C to G major:

(*b*)



(*a*) The second chord—A minor—belongs to C major and to the new key, E minor.

(*b*) The chord of F major belongs to C major and not to the new key, G major.

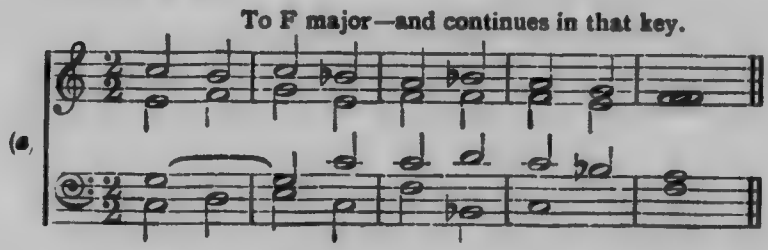
66. In addition to being "gradual," or "sudden," modulation may be:

(*a*) Permanent;
(*b*) Transient.

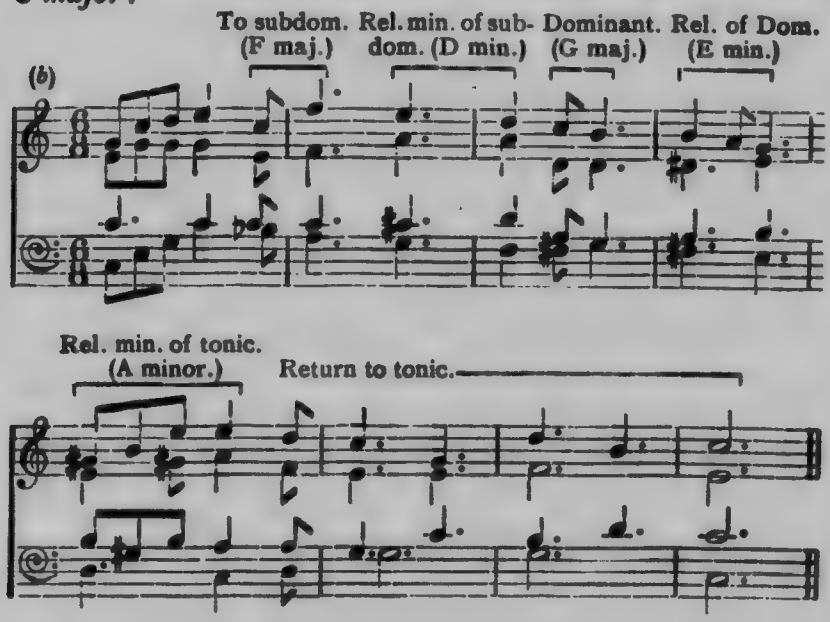
(*a*) *I.e.*, the new key is established and the music continues in that key.

(*b*) *I.e.*, the new key is merely passed through, and the modulation either continues to another key (or through a series of keys), or returns to the first key.

Example of permanent modulation :

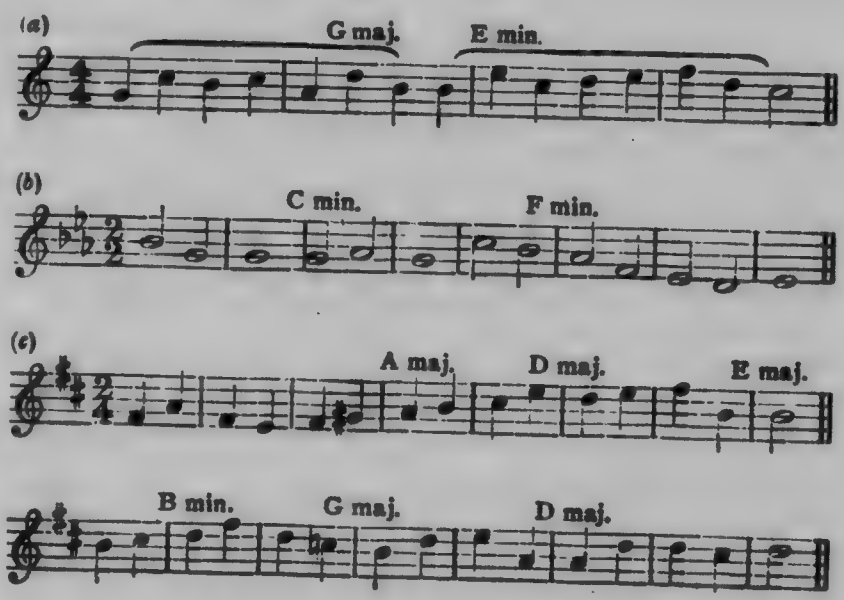


Example of transient modulations to the five related keys of C major :



Questions and Exercises on Chapter IX.

1. Define "modulation."
2. What is meant by "natural" modulation?
3. What are the relative, or attendant, keys of the key of A?
4. What is the difference between "sudden" and "gradual" modulation?
5. Modulate, by means of the dominant 7th, or its inversions, from B♭ major to all its related keys.
6. Write an example of "permanent" modulation in the key of F, in simple triple time.
7. What is "transient" modulation?
8. Harmonize the following in four parts, modulating at the points indicated:



CHAPTER X.

CHROMATIC TRIADS.

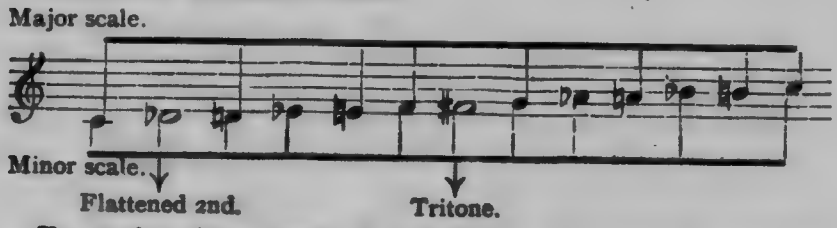
67. A chromatic triad is formed by altering chromatically at least one note of a diatonic triad. It may be used in both major and minor keys, and does not necessarily imply a modulation.

68. All the chords peculiar to a minor key, and their inversions, may be used chromatically in the key of the tonic major, with the sole exception of the tonic minor chord itself. An examination of the harmonic chromatic scale will exemplify this.

It is formed by utilising the notes found in:

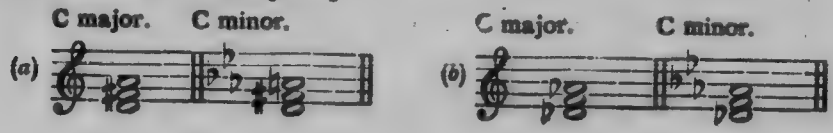
(i.) The major scale;
(ii.) The minor scale (according to the signature); and adding
(iii.) The tritone (or sharpened 4th); and
(iv.) The flattened 2nd.

Harmonic chromatic scale.



From the above scale, in addition to the chords contained in a major scale and its tonic minor, two important chromatic triads are available, viz., that on the supertonic (*a*) and that on the flattened 2nd (*b*).

[*Chromatic major triads can be used on every chromatic degree of a scale, but students should confine themselves to those explained in this chapter.*]



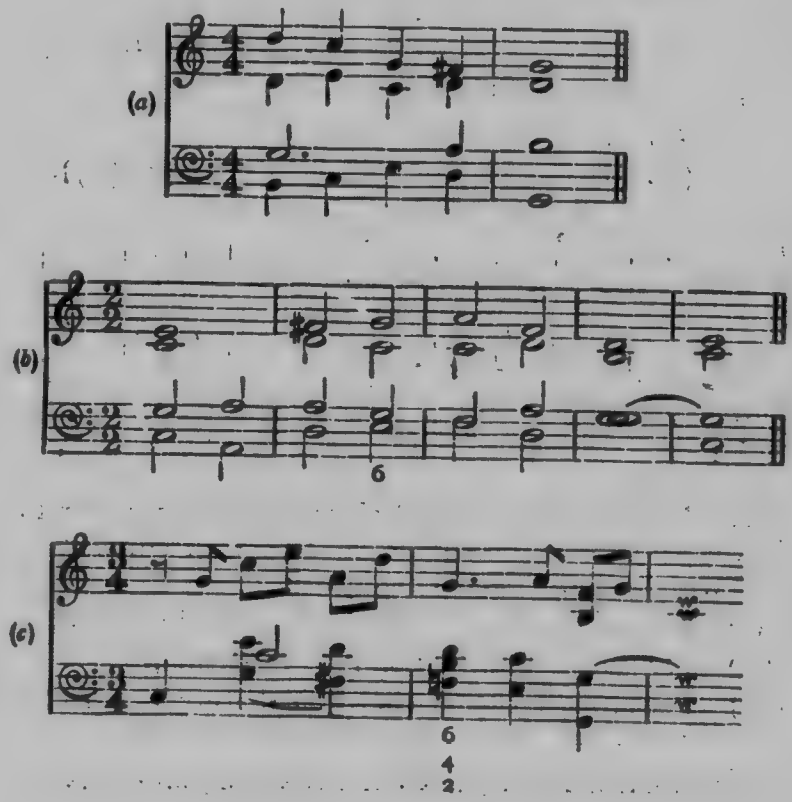
(*a*) In a major key the 3rd is chromatic.
In a minor key the 3rd and 5th are chromatic.

(*b*) In a major key the root and 5th are chromatic.
In a minor key the root only is chromatic.

69. A chromatic chord is distinguished from a diatonic chord by the manner in which it is treated; *e.g.*, if the supertonic chromatic chord is followed by dominant harmony, modulation to that key (the dominant) will take place (*a*), but if treated as a chromatic chord it will be followed by:

(i.) Some form of tonic chord (*b*); or

(ii.) A chord containing the diatonic 4th of the key (usually a dominant 7th (*see* §127 (*b*), (*c*)).



(*a*) The supertonic chord is diatonic, since a modulation takes place to the dominant key.

(*b*) The supertonic chord is followed by an inversion of the tonic chord and is therefore chromatic.

(*c*) The supertonic chord (1st inversion) is followed by a chord which contains the diatonic 4th of the key, and is chromatic.

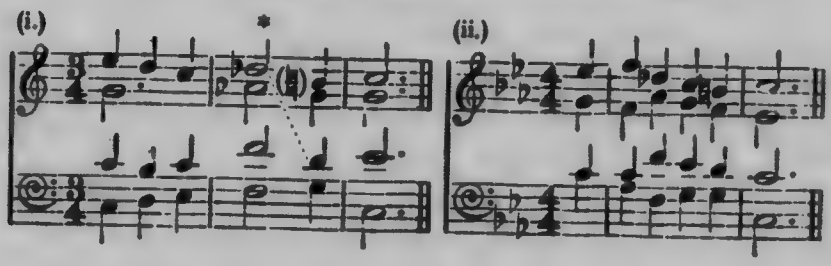
In the supertonic major triad the 3rd must either rise or fall a semitone, and should never be doubled.

70. The major chord on the flattened 2nd of the key (*see* §68 (*b*)) is more frequently used in the minor than in the major key. It is most satisfactory in its first inversion when, for some obscure reason, it is called a Neapolitan 6th (*see* §59).

It proceeds naturally:

(i.) To dominant harmony; or—

(ii.) To cadence on the dominant (*see* §59 (ii.)).



71. As was stated in §68 all the chords peculiar to a minor key, and their inversions, may be used chromatically in the tonic major. These chords are:

(i.) The minor common chord on the subdominant;

(ii.) The diminished triad on the supertonic;

(iii.) The major common chord on the minor 6th of the scale.

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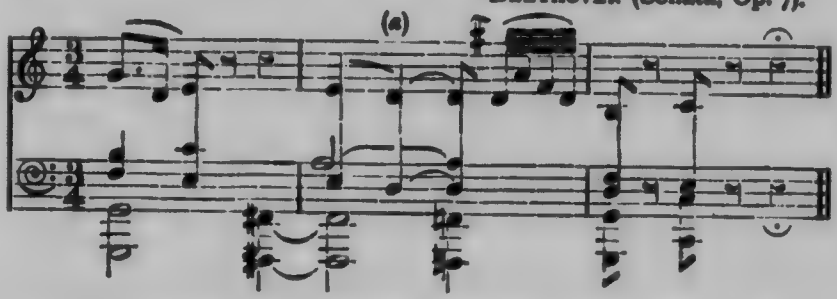
* *There is no ambiguity of key, consequently no false relation.*

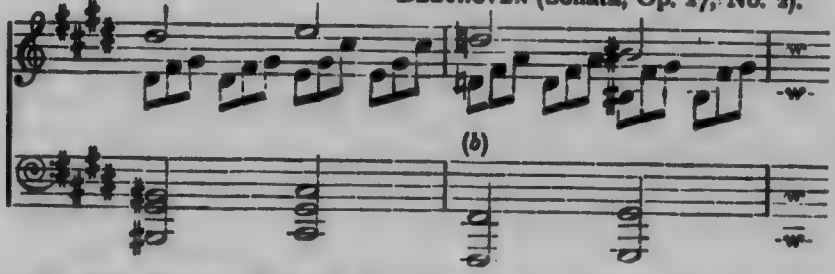
The following short extracts show chromatic chords, and should be carefully studied:

BEETHOVEN (Sonata, Op. 7).



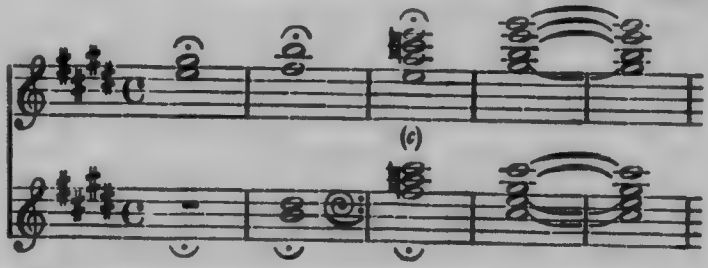
(a) *The inversion of the chromatic supertonic triad resolves on the 1st inversion of the supertonic triad.*

BEETHOVEN (Sonata, Op. 27, No. 2).



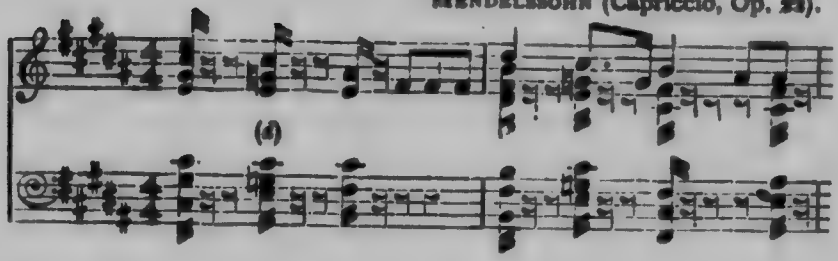
(b) *First inversion of major chord on minor 2nd resolving on dominant harmony* (§70).

MENDELSSOHN ("Midsummer Night's Dream").

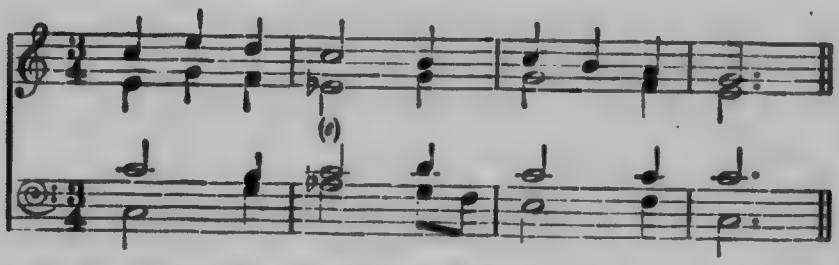


(c) *Minor common chord on subdominant.*

MENDELSSOHN (Capriccio, Op. 22).



(d) *First inversion of diminished triad on supertonic.*



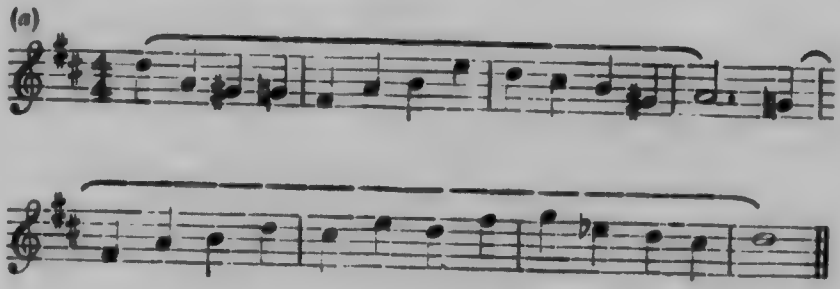
(e) *Major common chord on minor 6th of scale.*

Questions and Exercises on Chapter X.

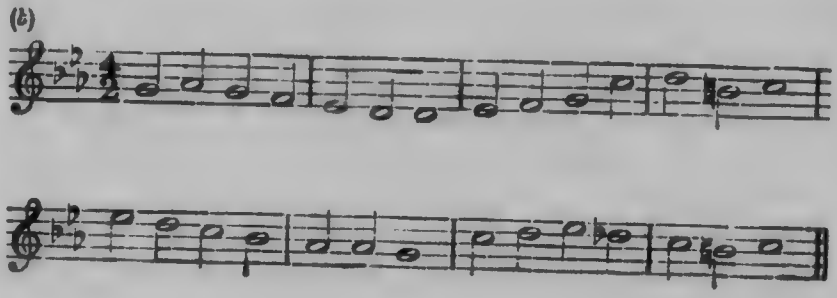
1. What is a Chromatic Triad?
2. Write out the harmonic chromatic scales of B♭, G, E, and D♭.
3. How is it possible to distinguish a chromatic from a diatonic triad?
4. In the key of B♭ write a passage showing the supertonic major triad:—(i.) As diatonic; (ii.) as chromatic.
5. Write a cadence in the key of D minor, introducing the 1st inversion of the flattened supertonic. By what name is this cadence known?

6. Harmonize the following:

(a)



(b)



CHAPTER XI.

UNESSENTIAL NOTES.

72. In addition to the essential notes of a chord, which have been dealt with in the preceding chapters, other notes can be freely introduced which form no part of the harmonic design. These are called Unessential Notes.

73. Unessential notes are of various kinds:

(i.) Passing-notes.
(ii.) Auxiliary notes.
(iii.) Changing notes.
(iv.) Notes of anticipation.
(v.) Driving notes.

74. Passing-notes are notes which are foreign to the harmonic scheme:

(*a*) They are *diatonic* if they proceed according to the key of the passage.

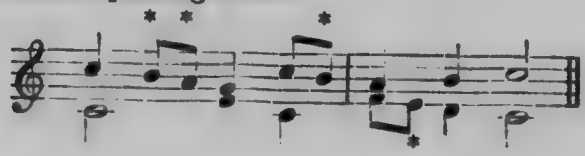
(*b*) They are *chromatic* if they proceed by semitones.

(*c*) They may occur in one part alone or in two or more parts simultaneously.

(*d*) Whether a passing-note be diatonic or chromatic it must be approached and quitted conjunctly (but *see* exception, §80).

(*e*) When one passing-note is succeeded by another, this second passing-note should proceed in the same direction until a harmony note is reached.

(*a*) Diatonic passing-notes:



(*b*) **Chromatic passing-notes:**

LYON ("Palace of Cards").

(x) (x) (y) (x)

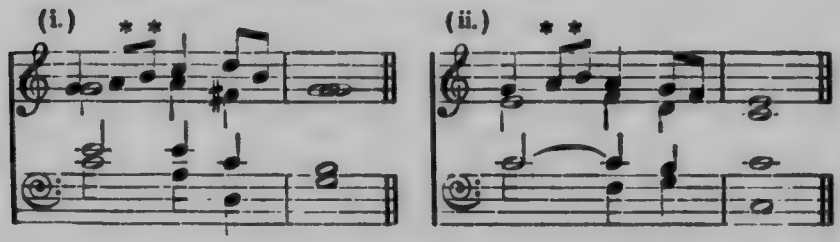
(*c*) **Diatonic passing-notes in more than one part:**

BEETHOVEN (Mass in C).

(*d*) **Diatonic and chromatic passing-notes approached and quitted conjunctly:**

§ *Auxiliary notes* (§79).
(x) *Chromatic passing-notes do not produce false relation* (§31).
(y) *Allowable false relation between two chromatic notes, one of which is an appoggiatura.*

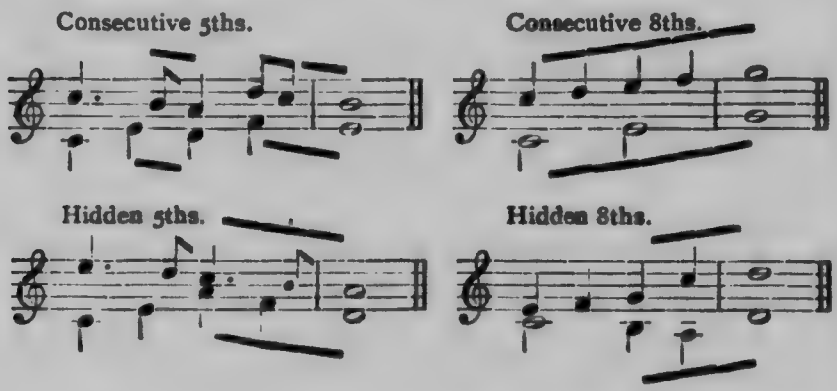
(*e*) Examples of two passing-notes:



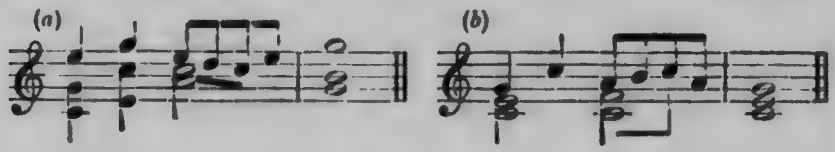
(i.) *Good, because the second passing-note* (B) *proceeds in the same direction to a harmony note* (C).

(ii.) *Not advisable* (§74 (*e*)).

75. Passing-notes should not produce forbidden consecutives (*see* §21):



76. In vocal writing, a passing-note may not proceed to the unison (*a*) in oblique motion, but it may to the octave (*b*):



77. In a minor scale, the major 6th and major 7th, or the minor 6th and minor 7th, may be used as passing-notes as required ((*a*) and (*b*)). Or the major 6th and major 7th may be taken ascending, and the minor 7th and minor 6th descending (*c*):

Major 6th & 7th.

(*a*)

Minor 6th & 7th.

(*b*)

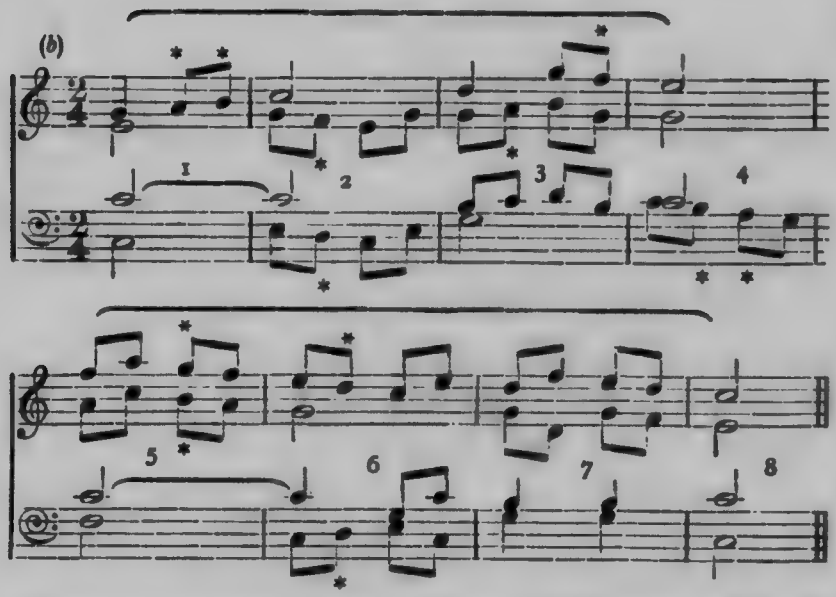
(*c*)

78. Examine the following passages:

The simple harmonic outline at (*a*), is elaborated by means of passing-notes, at (*b*):

(*a*)

1 2 3 4 5 6 7 8



The student is recommended to study the Chorales of Bach. He will learn much by first of all reducing them to the simplest possible harmonic outline, and after filling in with passing-notes, &c., comparing them with the original of Bach.

79. Auxiliary notes approach essential notes from the distance of a 2nd, above or below:

(*a.*) An auxiliary note treated as an appoggiatura may be approached and quitted by leap.

(*b.*) Unlike the passing-note it may return to the note from which it proceeded.

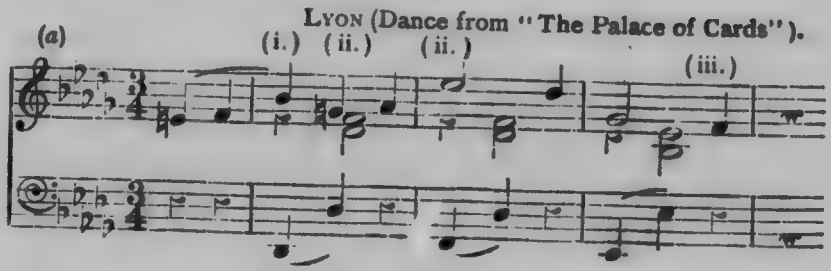
(*c.*) Auxiliary notes may appear in more than one part at the same time.

(*d.*) An auxiliary note is generally a semitone *below* an essential note, except when that note happens to be the 3rd of the key. It may then be either a tone or a semitone below it.

(*e.*) When an auxiliary note appears *above* an essential note it should be diatonic.

(*f.*) Accented auxiliary notes are merely *appoggiaturas* (*see* example (*b*), §74).

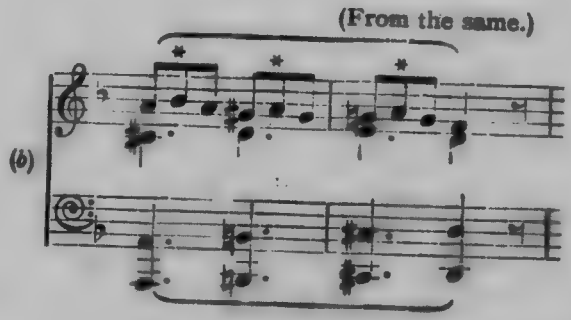
Examples of Auxiliary notes :



(i.) *Auxiliary note approached and quitted by leap.*

(ii.) *Auxiliary note approached by leap : treated as an appoggiatura.*

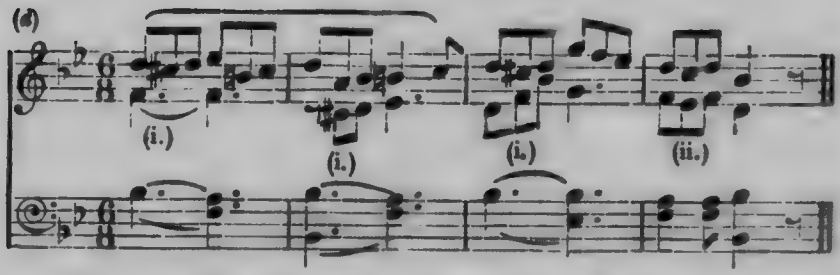
(iii.) *Auxiliary note quitted by leap.*



* *Auxiliary note returning to note from which it proceeded.*

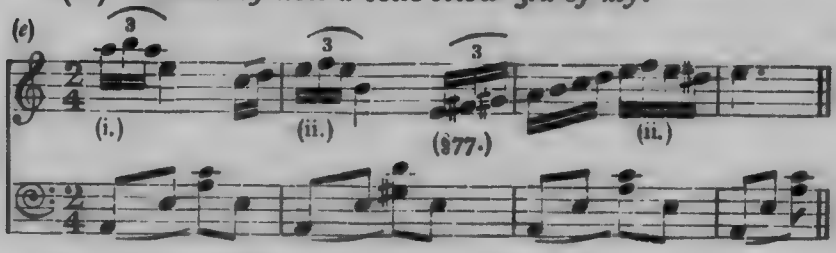
† *Two auxiliary notes in combination.*

(d)



(i.) *Auxiliary note a* semitone *below 3rd of key.*
(ii.) *Auxiliary note a* tone *below 3rd of key.*

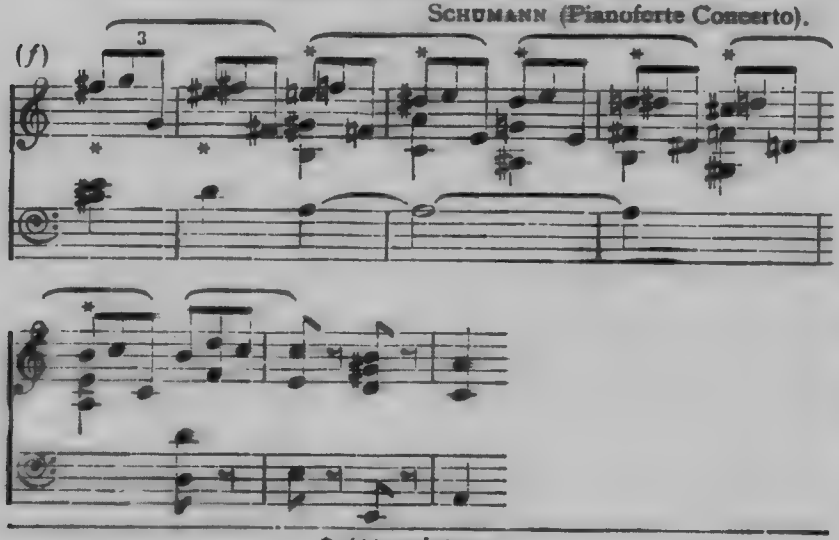
(e)



(i.) *The auxiliary note is a* tone *above the essential note.*
(ii.) *The auxiliary note is a* semitone *above the essential note to conform to the diatonic scale of A minor.*

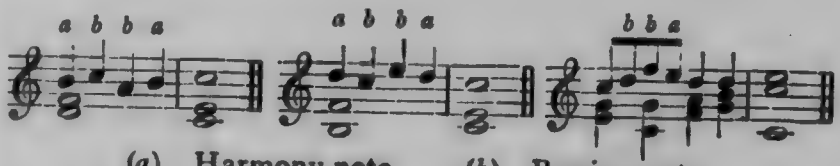
SCHUMANN (Pianoforte Concerto).

(f)



* *Appoggiaturas.*

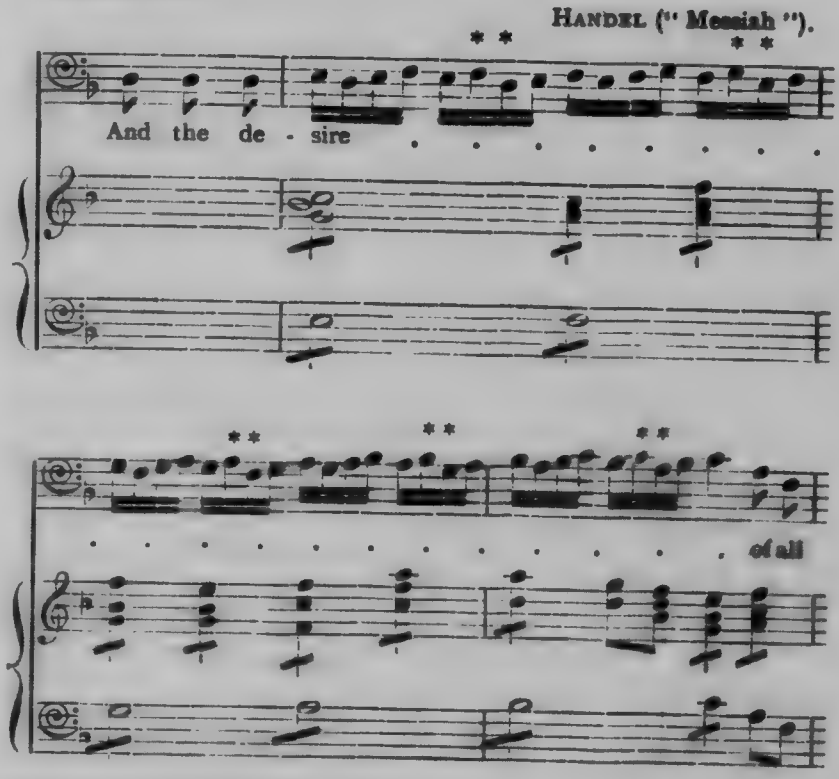
80. Changing notes are formed by two passing-notes, the first of which leaps a 3rd, to the other side of the harmony note. The second passing-note returns to the harmony note:



(*a*) Harmony note. (*b*) Passing-note.

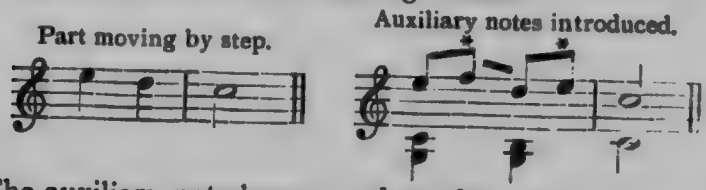
Illustration:

HANDEL ("Messiah").



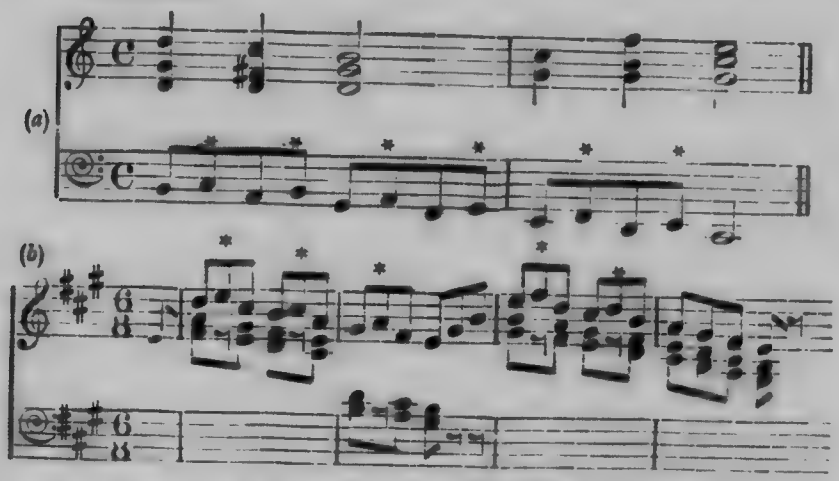
* Changing notes.

When a part moves by step of a 2nd an auxiliary note may be introduced in the following manner:



The auxiliary note leaps a 3rd to the next harmony note. This is generally accepted as a species of "changing notes."

Examples:



81. A Note of Anticipation is a note of a chord sounded before the other notes of that chord, and during a preceding chord of which it forms no part.

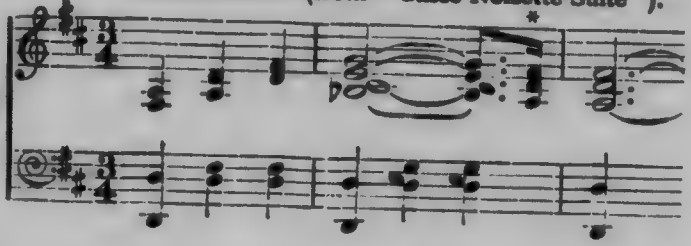
One, two, or more notes of a chord can be "anticipated":

A note of anticipation most frequently appears in a cadence:

(a)

TSCHAIKOWSKY (from "Casse Noisette Suite").

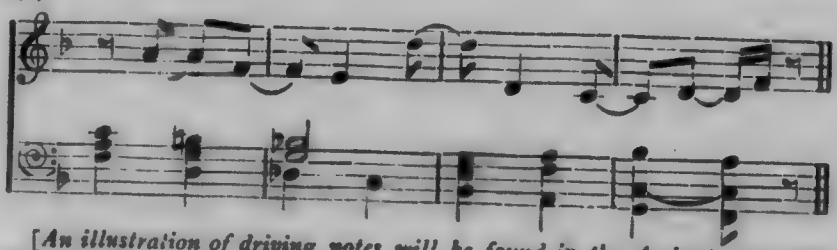
(b)



82. A Driving Note is a note of a chord sustained while the other parts move to a new chord, of which the sustained note does not necessarily form a part.

It may leap freely (and in this it differs from a suspension and a retardation) (Chapter XII.), provided the leap be to a note of the new chord:

(a)



[*An illustration of driving notes will be found in the Andante con moto (Sonata, Op. 57) Beethoven.*]

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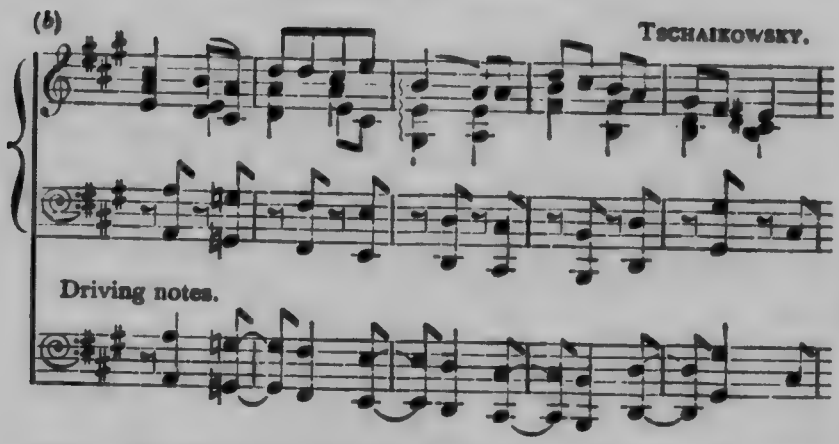
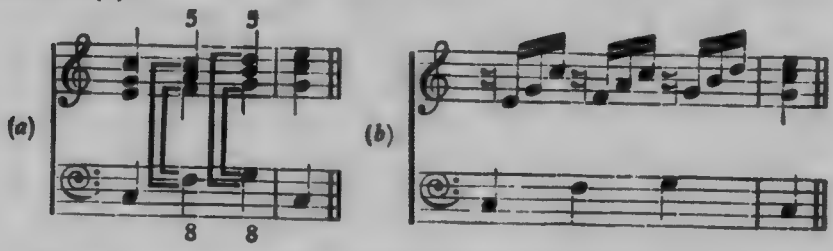
* Complete chord anticipated.



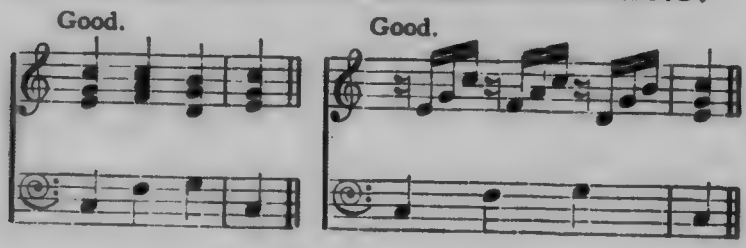
83. An Arpeggio consists of the notes of a chord played in succession instead of together.

It is one of the simplest forms of embellishment, and admits of great variety of treatment.

Care must be taken that the harmonies on which the arpeggios are built are grammatical. Thus the progression at (*a*), being in itself bad, would still be bad if treated as at (*b*):



The following shows a revised version of the above:



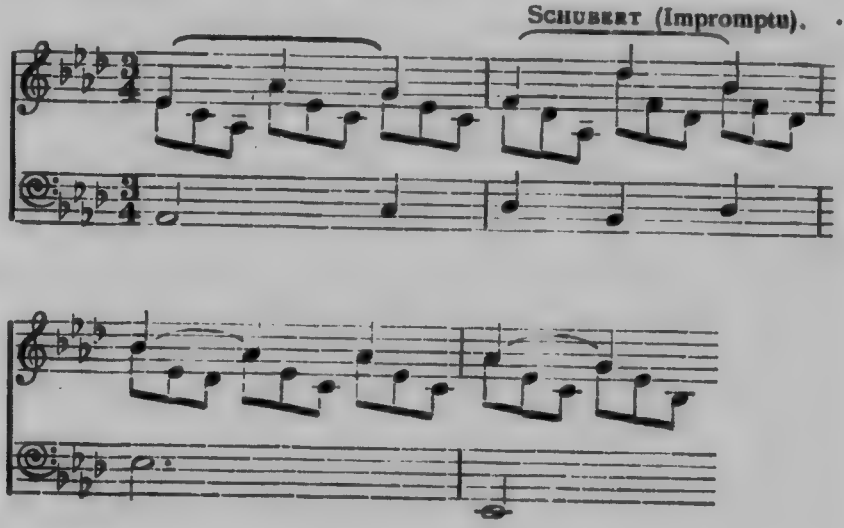
84. The student is advised to take the following and write each passage out chordally:

(i.) Beethoven Sonata, Op. 10, No. 3 (*Largo*, 23 bars from end).

(ii.) Beethoven Sonata, Op. 14, No. 2 (*Andante*, last 26 bars).

(iii.) Schumann, Op. 124, No. 6.

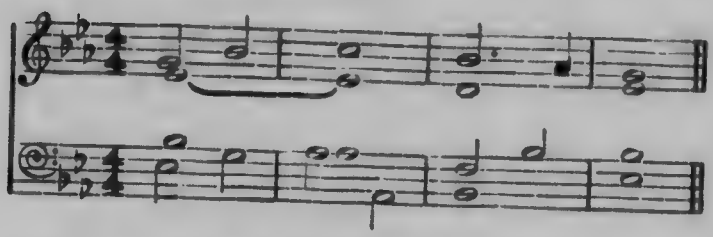
A short example will illustrate the method of procedure:



The same reduced to chords:

Questions and Exercises on Chapter XI.

1. How must a passing-note be approached and quitted? Give an illustration.
2. Distinguish between a diatonic and a chromatic passing-note.
3. What is an auxiliary note?
4. What musical ornament is in reality an auxiliary note?
5. What are changing notes? Write a cadence in B♭ major by way of illustration.
6. Introduce unessential notes in each part in the following passage:



7. Write a short passage, for four voices, in the key of F, simple quadruple-time, introducing unessential notes in each part.
8. To the following basses add three upper parts, keeping up the crotchet movement in one or other of the parts:

(*a*)

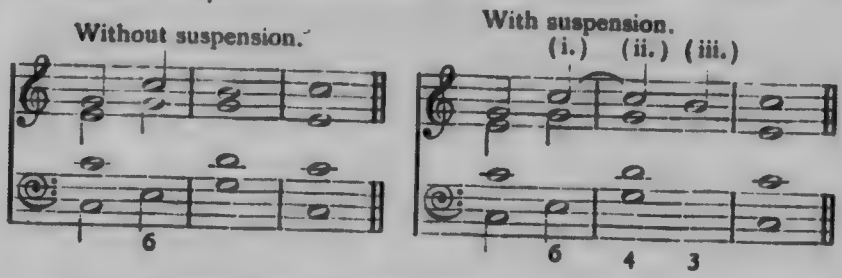
(*b*)

CHAPTER XII.

SUSPENSIONS.

85. A Suspension is the prolonging of an essential note of one chord until another chord, of which it forms no part, is sounded.

Such suspended note must appear, *in the same part*, in both chords, and must resolve by descending one degree to an essential note of the second chord. Thus:



(i.) Preparation of the discord.
(ii.) Suspension of the discord (C, which is no part of the chord of G).
(iii.) Resolution of the discord.

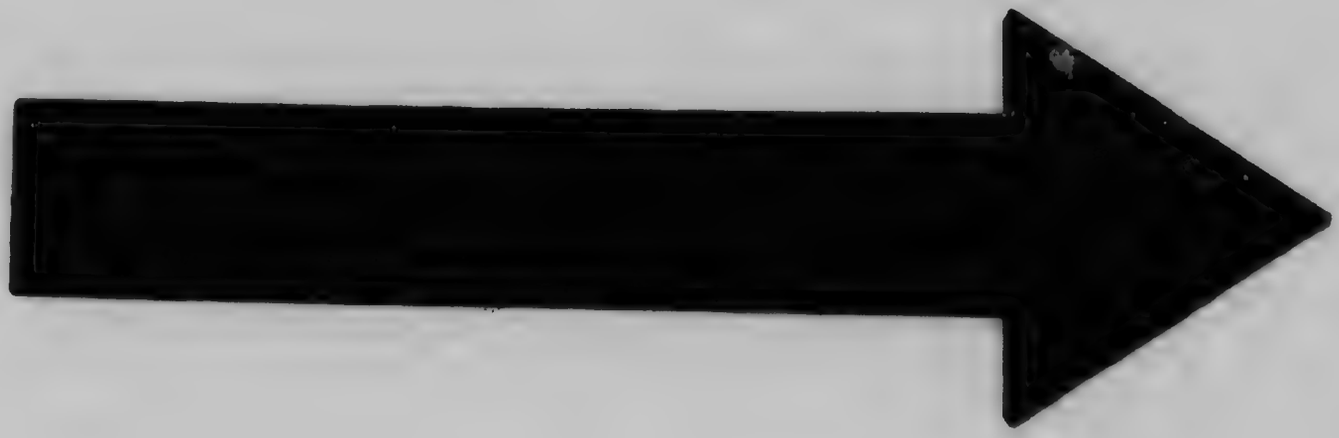
86. The 8th, 5th, or 3rd of a common chord may be suspended.

When the 8th is suspended the figuring is:

9 8 (implying $\begin{cases} 9\ 8 \\ 5\ — \\ 3\ — \end{cases}$).

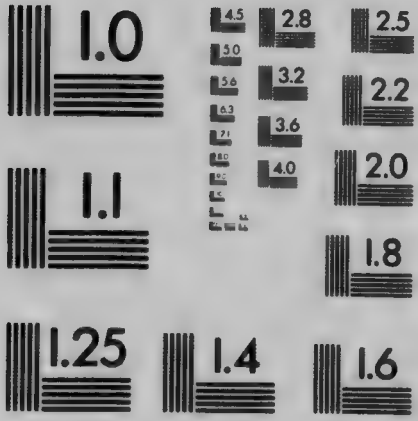
When the 5th is suspended the figuring is:

6 5 („ $\begin{cases} 8\ — \\ 6\ 5 \\ 3\ — \end{cases}$).



MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)



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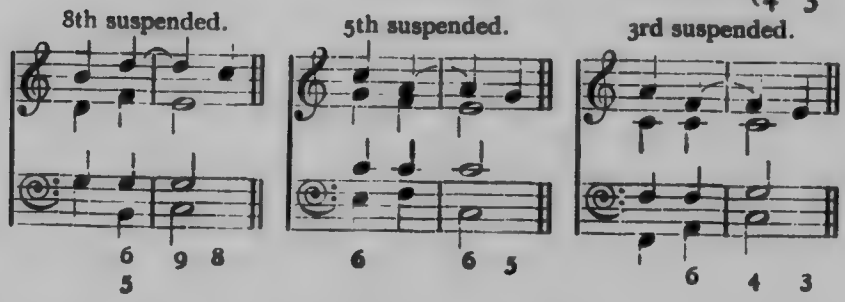
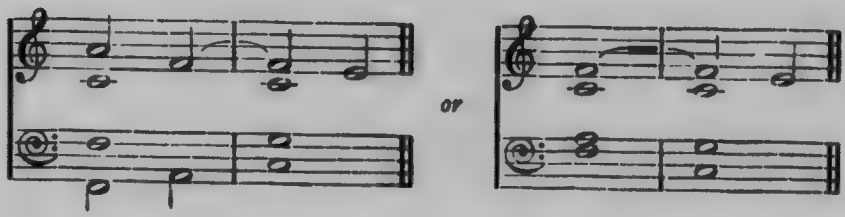
(716) 288 - 5989 - Fax

When the 3rd is suspended the figuring is:

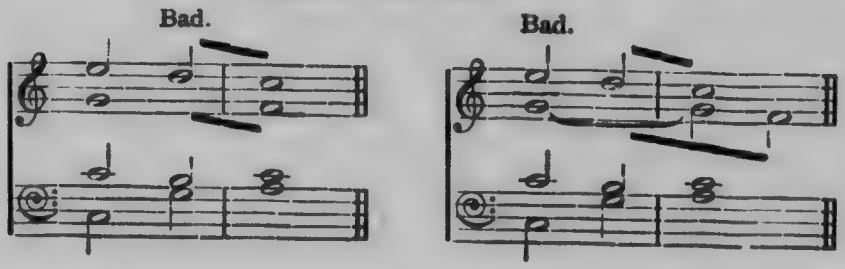
4 3 (implying $\begin{cases} 8 & — \\ 5 & — \\ 4 & 3 \end{cases}$).



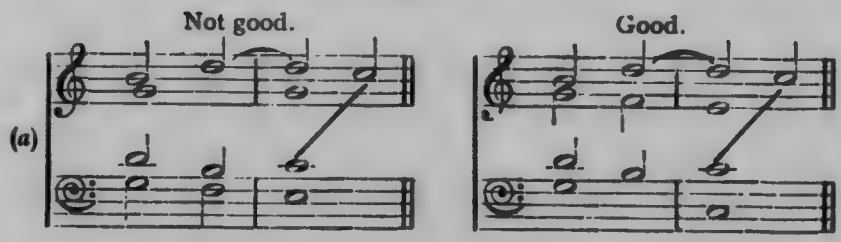
87. (i.) A *suspension* should appear on an accented beat, but the *preparation* may be either on an accented or on an unaccented beat:



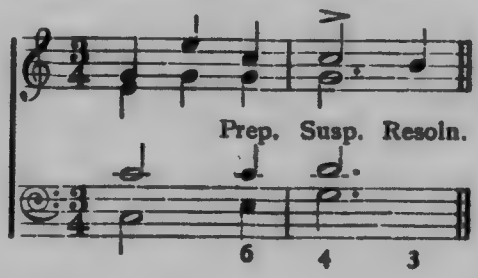
(ii.) "A passage which is bad without a suspension is not good with one":



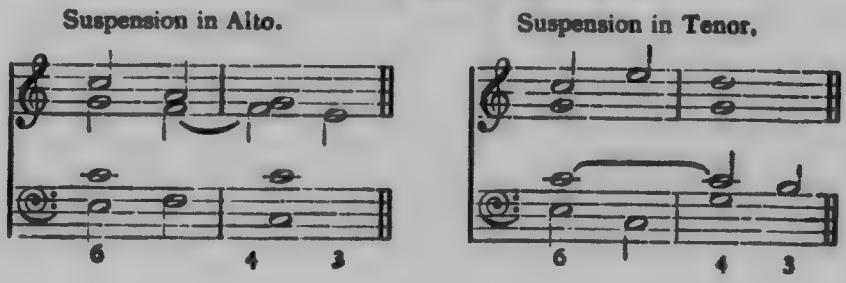
(iii.) The note of resolution should not be sounded in any part except the bass at the same time as the suspension (*a*) (but *see* §88 (*d*)), or except when the bass is doubled, either at the unison or the octave (*b*):



(iv.) It is not always necessary to tie the suspension to the note of preparation. In fact, when the latter is of less time-value than the former the two are often better not tied:

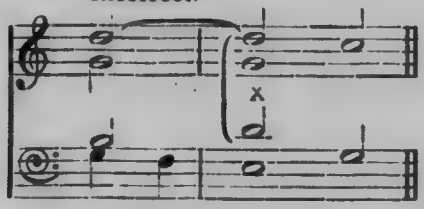


(v.) Suspensions may appear in any part:



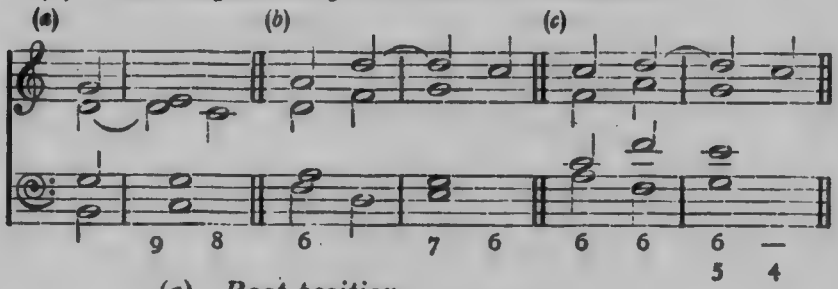
(vi.) **The suspension should not be doubled:**

Incorrect.



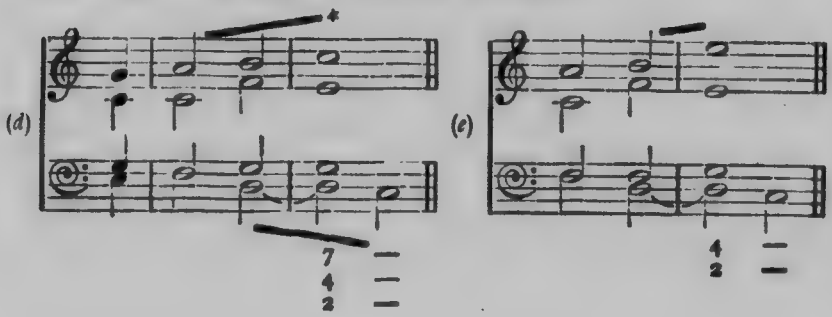
88. The following examples show the inversions of the suspensions 9 to 8, 6 to 5, and 4 to 3 on the common chord of C.

(i.) The suspension 9 to 8 and its inversions:



(*a*) *Root position.*
(*b*) *1st inversion* (7 *to* 6) *implies a* 3.
(*c*) *2nd inversion.*

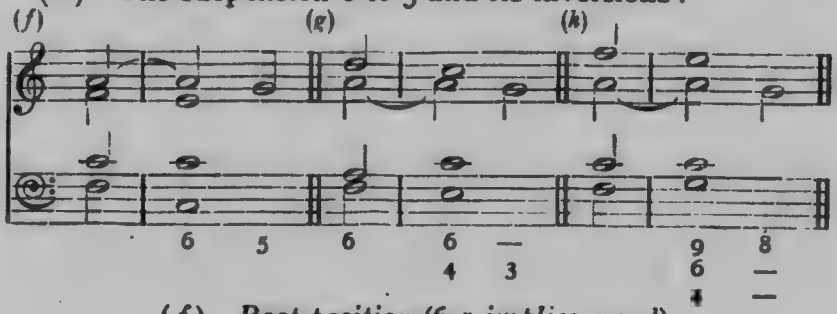
The suspension may be used in the bass:



(*d*) *At * the note of resolution appears* above *the suspension. This is tolerated when the parts move by contrary motion and conjunct movement, and when the suspended note is either dominant or tonic.*

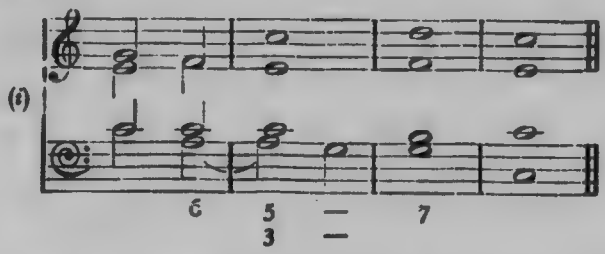
(*e*) *Notice leap of the leading-note and doubled major 3rd.*

(ii.) The suspension 6 to 5 and its inversions:

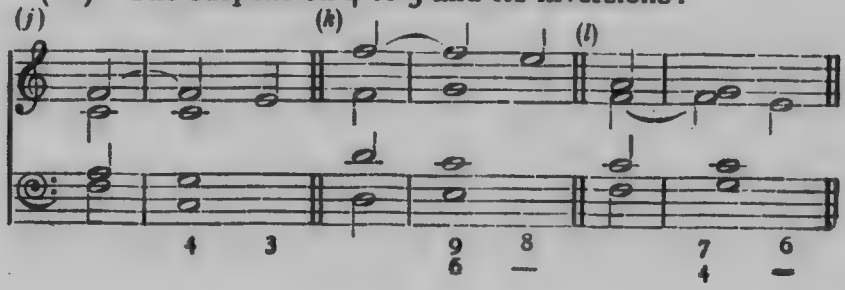


(*f*) *Root position* (6 5 *implies a 3rd*).
(*g*) *1st inversion.*
(*h*) *2nd inversion.*

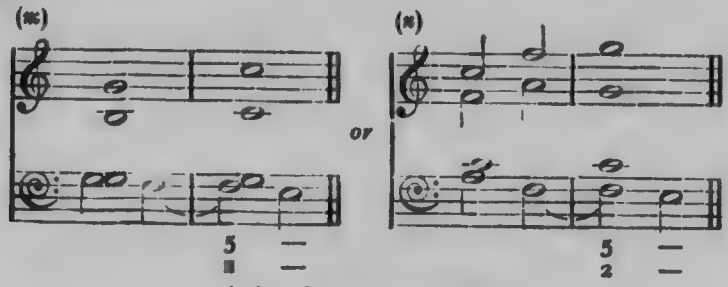
The suspension may be used in the bass, but is not very satisfactory:



(iii.) The suspension 4 to 3 and its inversions:



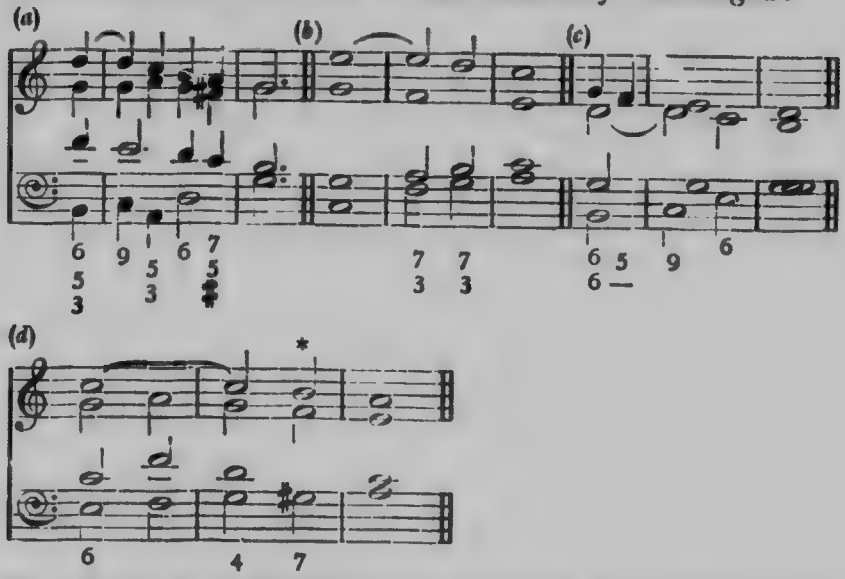
The suspension may be used in the bass with excellent effect:



(*m*) *Root doubled.*
(*n*) *5th of root doubled.*

89. The suspensions 9 to 8 and 4 to 3 may be used on any note of a major scale bearing a common chord. In a minor scale, since there are only four common chords, their use is necessarily restricted.

90. Provided the suspension ultimately resolves on to the note suspended, the chord of resolution may be changed:

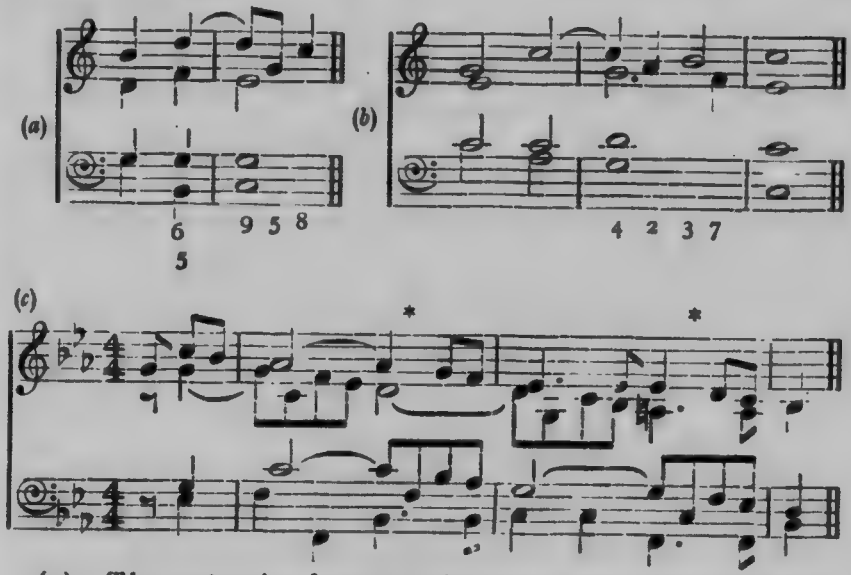


* The chord of the *diminished 7th* is explained in Chapter XIV. (§109).

91. Since the figuring of suspended discords closely resembles that of diatonic discords, the following points of difference should be noted:

Suspended discord.	*Diatonic discord.*
1. Must be prepared.	1. *Preparation* not necessary.
2. Must appear on accent.	2. May appear at any point.
3. Does not form part of chord in which it appears.	3. Essential to chord in which it appears.

92. It has been pointed out that dominant 7ths can be ornamentally resolved (*see* §54). Suspensions may be similarly treated.

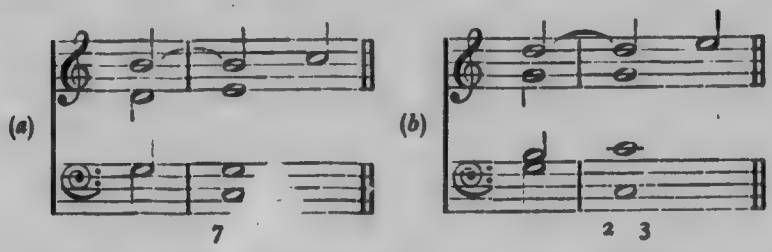


(*a*) *The suspension leaps to a harmony note before resolving.*

(*b*) *The suspension leaps to a dissonant note* on the other side of the note of resolution (*see* §80).

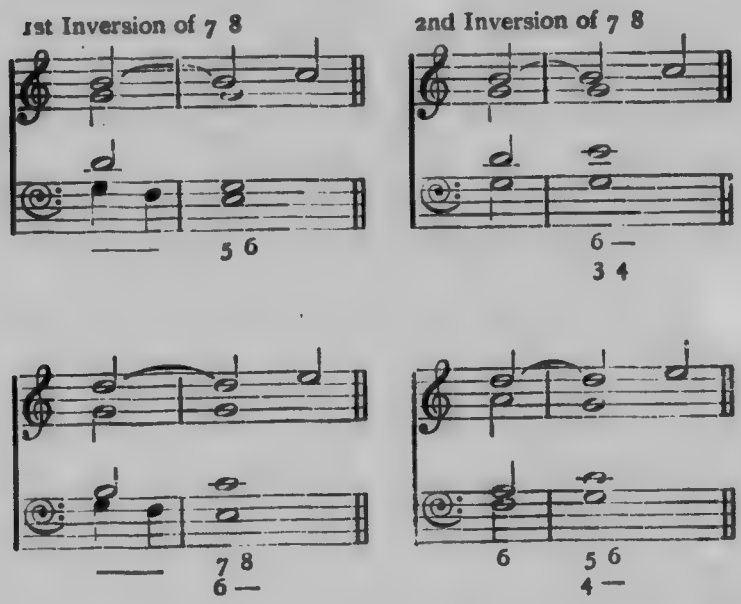
(*c*) *A succession of suspensions,* 9 *to* 8. *In each case a harmony note is introduced between the suspension and its resolution. Double suspensions* (*see* §94) *are marked* *.

93. A Retardation is caused by a prepared unessential discord resolving one degree *upwards*. The retardations most commonly met with are 7 to 8 and 2 to 3:



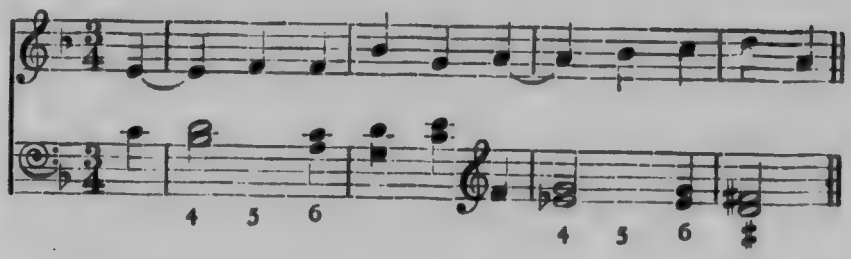
(*a*) *The 8th is retarded.* (*b*) *The 3rd is retarded.*

These retardations may appear over the inversions:

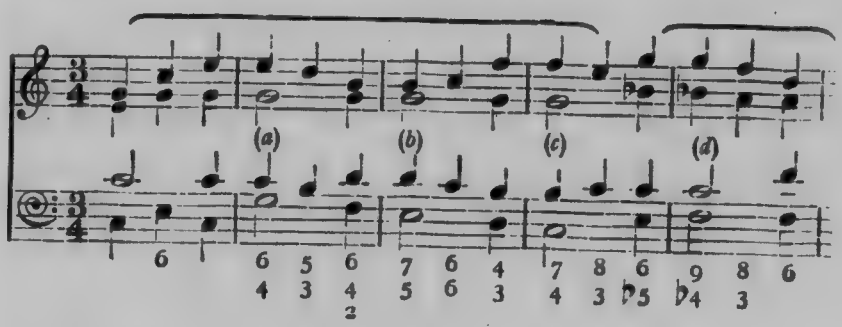


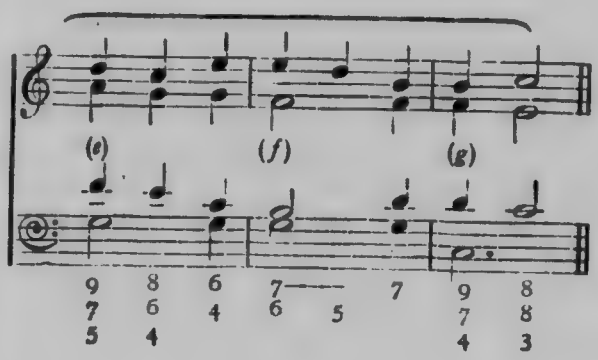
The retardation 5 4 may also be used, but is more difficult to manage satisfactorily than the 7 8 or the 2 3.

The following is an illustration:



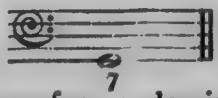
94. Suspensions may appear in two or more parts simultaneously. They may also be used in conjunction with retardations, either in root position or inverted:

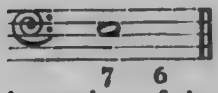




(*a*) *Double suspension* 6 5 *or* 4 3 (*see remarks in* §91).
(*b*) *Suspension* 7 6 *and retardation* 5 6.
(*c*) *Suspension* 4 3 *and retardation* 7 8.
(*d*) *Double suspension* 9 8 *and* 4 3.
(*e*) *Triple suspension* 9 8 : 7 6 *and* 5 4.
(*f*) *Suspension* 6 5.
(*g*) *Suspensions* 9 8 *and* 4 3 *and retardation* 7 8.

95. As was pointed out in §91 the figuring of suspended discords resembles that of diatonic discords. To determine the exact chord which the figures are intended to denote, the *quality* of the intervals must be carefully examined.

Thus  implies a major 3rd or a perfect 5th and is therefore a dominant 7th in the key of C; whereas,

 implies a *minor* 3rd only, being the 1st inversion of the suspension 9 8 on the tonic, C.

Questions and Exercises on Chapter XII.

1. What is meant by "a suspended discord"?
2. Explain the difference between a suspension and an auxiliary note.
3. What are the three necessary processes in the treatment of a suspension?
4. How many suspensions are there? Name them.
5. What intervals are implied in the root position of a 9 to 8 suspension?
6. Give the figuring of the inversions of the suspension 4 to 3.

7. In the key of B♭ major write an ornamental resolution of the suspended 4th.

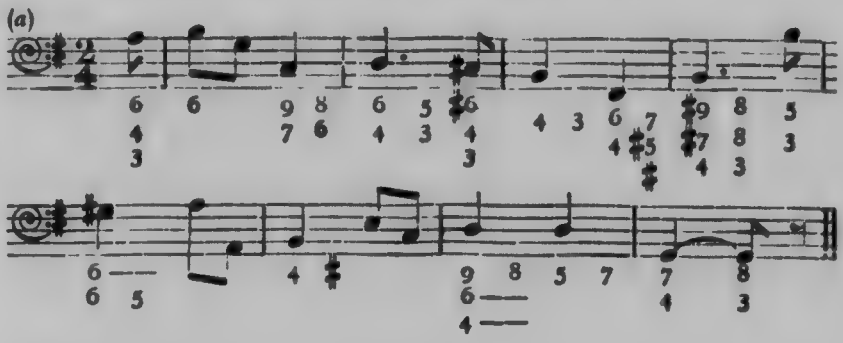
8. What is the difference between a suspension and a retardation?

9. Give an illustration of a double suspension in the key of G.

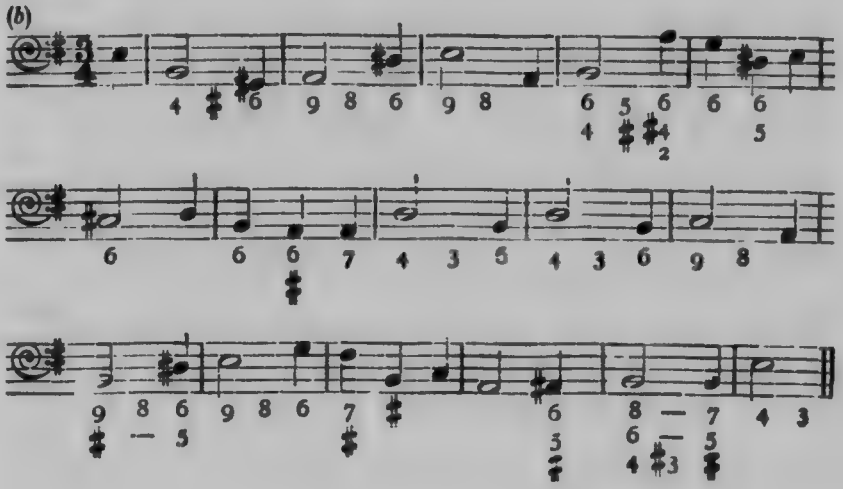
10. Combine a retardation and a double suspension in the key of A.

11. Harmonize the following basses in four parts:

(a)



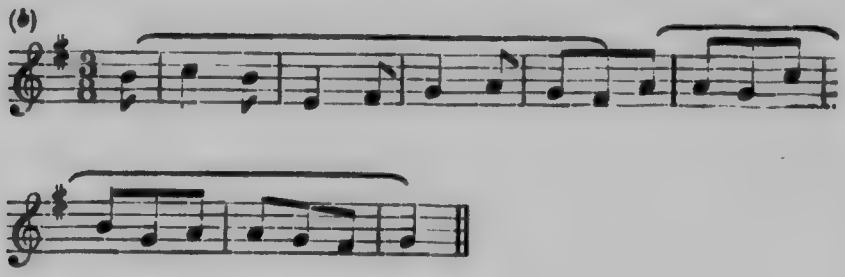
(b)



12. Harmonize the following melodies in four parts, introducing suspensions and retardations:

(a)

(b)



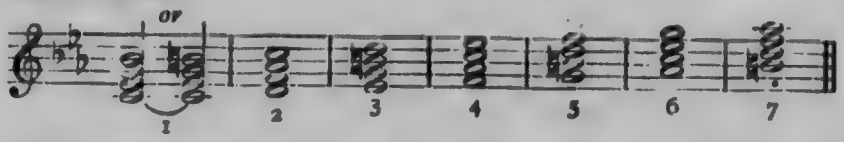
CHAPTER XIII.

SECONDARY CHORDS OF THE SEVENTH.

96. Secondary Chords of the Seventh may be formed on each degree of a major or minor scale :

Major Scale of C.

Minor Scale of C.



The dominant 7th (No. 5 of the above series) has already been explained (Chapter VII.).

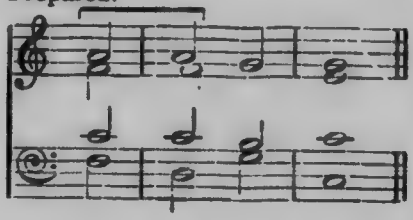
The remaining chords of the series are called Secondary Sevenths.

[*They are also known as diatonic discords, or non-dominant 7ths.*]

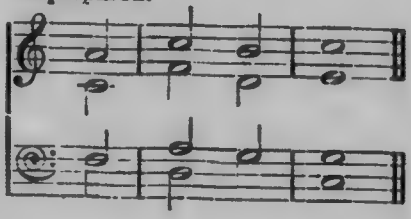
It will be observed that the intervals of these secondary 7ths differ in quality from those of the dominant 7th, *e.g.:* A dominant 7th consists of a major 3rd, perfect 5th, and minor 7th, whereas, in a secondary 7th, the 3rd may be major or minor, the 5th perfect, augmented, or diminished, and the 7th major or minor.

97. Secondary 7ths may be taken with or without preparation, but the student is advised to prepare such as bear a *major* 7th:

Prepared.



Unprepared.



98. Secondary 7ths resolve in the following manner:

(i.) The 7th either falls one degree or remains stationary.

(ii.) The 3rd is free to rise or fall (generally by step).

(iii.) The progression of the bass depends on the chord of resolution.

99. A secondary 7th is usually followed by:

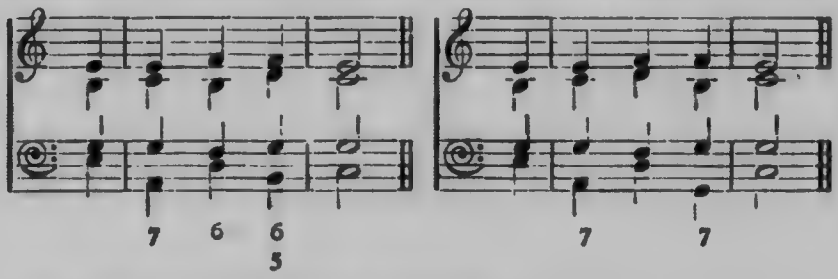
(i.) A fundamental chord (§46) in the key; or,

(ii.) A chord whose root is a 4th above (or a 5th below) the primary bass of the diatonic discord; or,

(iii.) Another secondary 7th; or,

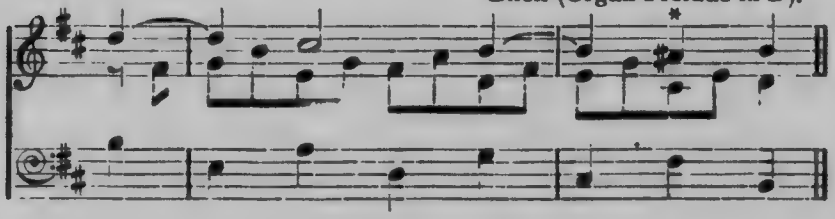
(iv.) A dominant 7th.

Resolving on fundamental harmony. Resolving on a chord a 4th above.



Resolving sequentially on other secondary 7ths.

BACH (Organ Prelude in D).



* Dominant 7th.

100. As inthe case of a dominant 7th, a secondary 7th has three inversions, which, though figured like those of the dominant 7th, differ from them in quality.

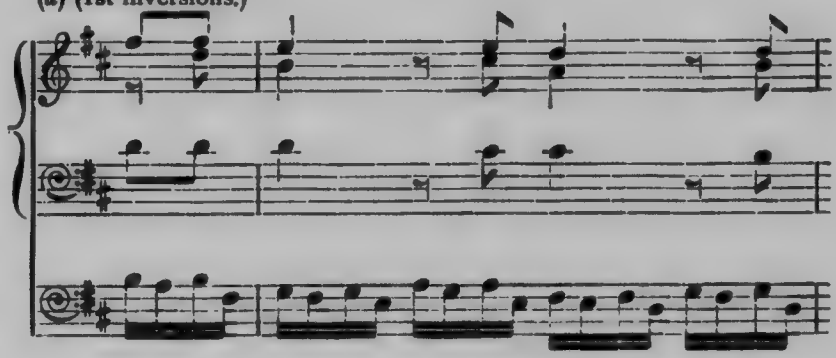
[*The 1st inversion of a secondary 7th on the supertonic is known as the chord of the added 6th—Chapter XV.*, §113.]

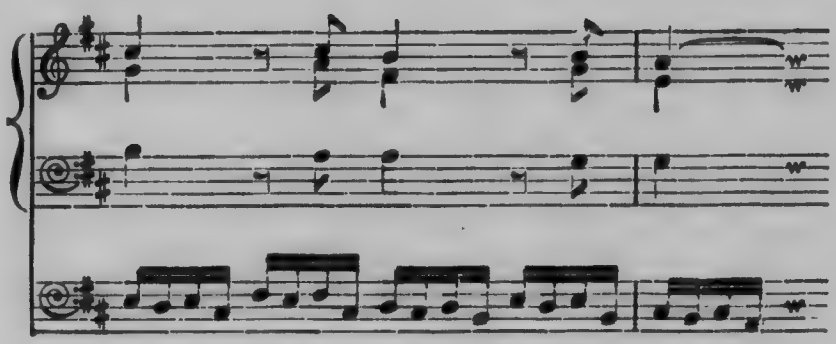
The following quotations are from the Fugue in D major of J. S. Bach, and illustrate

(*a*) Secondary 7ths in the 1st inversion;

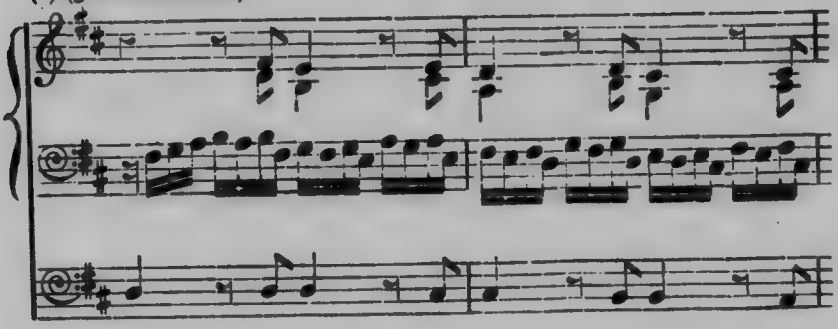
(*b*) Secondary 7ths in the 3rd inversion.

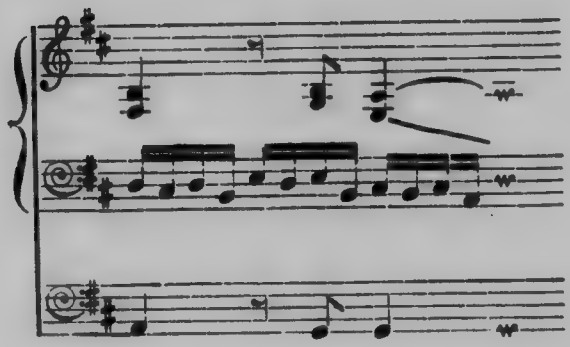
(*a*) (1st inversions.)





(*b*) (3rd inversions.)



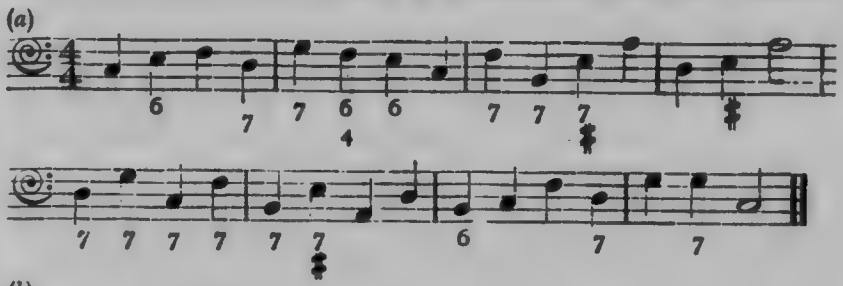


Questions and Exercises on Chapter XIII.

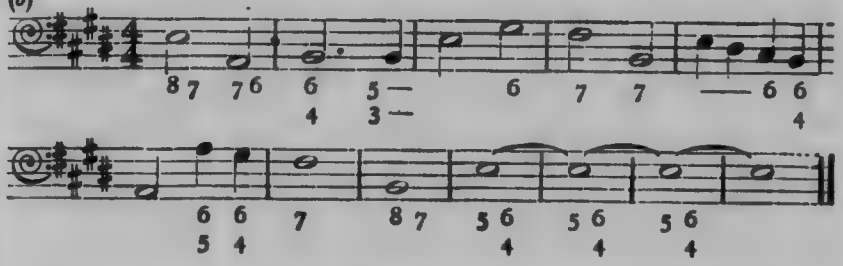
1. What are secondary 7ths, and in what particular do they differ from dominant 7ths?
2. Write out the secondary 7ths, in the key of A, which have a major 3rd and a major 7th.
3. Write out the secondary 7ths, in the key of B minor, which have a major 3rd and a major 7th.
4. Write a sequence of secondary 7ths in the key of F.
5. Which of the secondary 7ths is it advisable to prepare?
6. Harmonize the following:

Add treble, alto, and tenor in accordance with the figures.

(a)

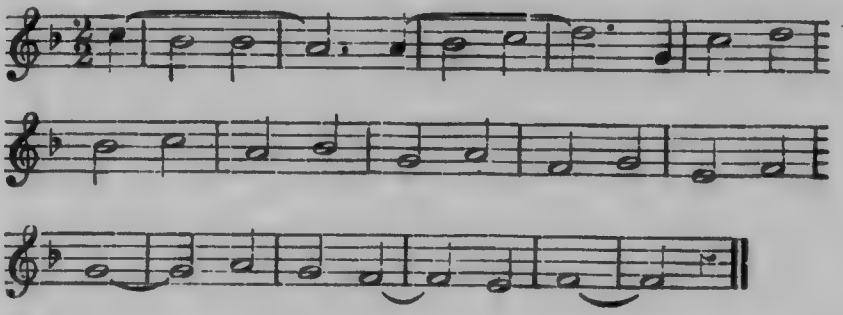


(b)

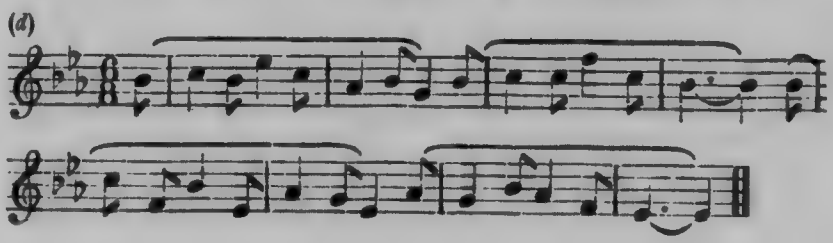


Add alto, tenor, and bass, introducing secondary 7ths:

(c)



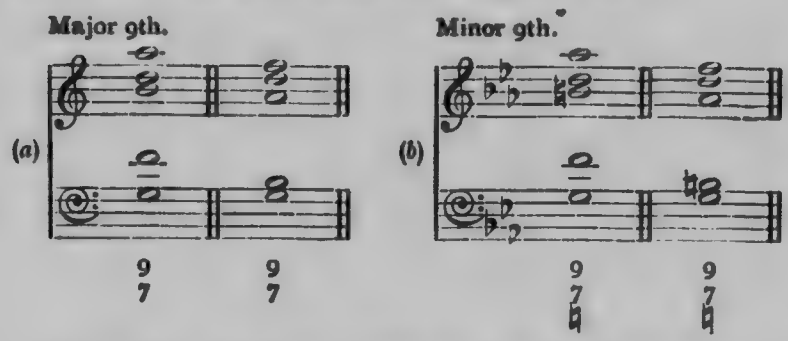
(d)



CHAPTER XIV.

THE DOMINANT NINTH.

101. A Dominant 9th is formed by the addition of a major or minor 3rd above the chord of the dominant 7th (at the distance of a major or minor 9th from the root):



102. The 9th may appear in any part, but only as a compound interval (*see* §5).

103. The major and minor 9th may each be taken without preparation, but if the major 9th is sounded at the distance of a 2nd *below* the leading-note, it is advisable to prepare one of the notes. If the 9th be minor this is unnecessary.

104. The minor 9th may be freely used in a major key, but the major 9th should only be used in a minor key in the form of a passing-note.

105. The chord of the 9th in its complete form consists of five notes (*see* §101 (*a*) and (*b*)); consequently, when writing in four parts, one note must be omitted:

(i.) The 5th is usually omitted in the root position; and—

(ii.) The root in the inversions.

106. The figuring 9 8 may indicate:

(i.) A fundamental 9th;

(ii.) A suspended 9th; or,—

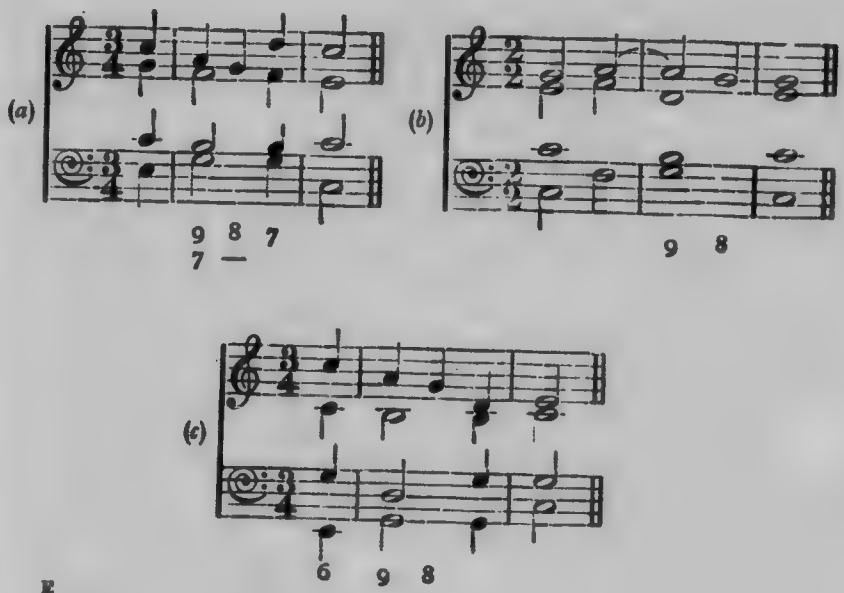
(iii.) An auxiliary 9th.

No difficulty will be found in distinguishing between them if it be remembered that:

(i.) The fundamental 9th contains a minor 7th, either in the chord itself or in the chord of its resolution, and need not be prepared (*a*);

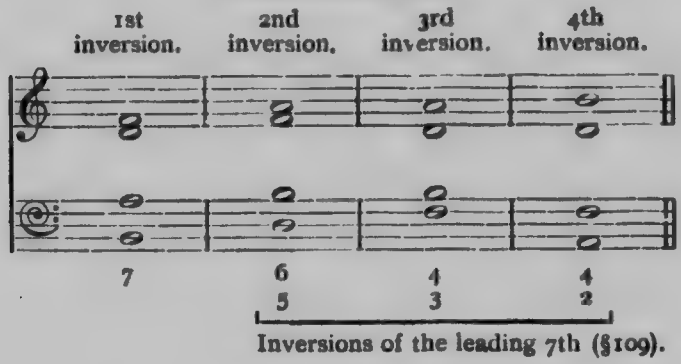
(ii.) The suspended 9th must be prepared, and does not contain a 7th (*b*);

(iii.) The auxiliary 9th is treated as an appoggiatura, and does not contain a 7th (*c*):

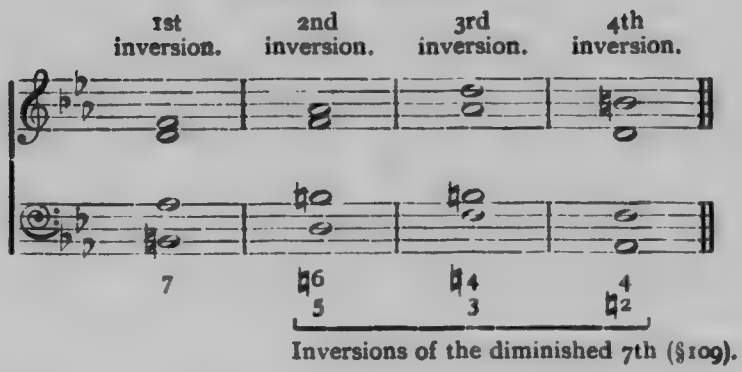


107. There are four inversions of the chord of the dominant 9th, figured as follows:

Dominant major 9th.



Dominant minor 9th.



108. The usual resolutions of the chord of the dominant 9th are as follows:

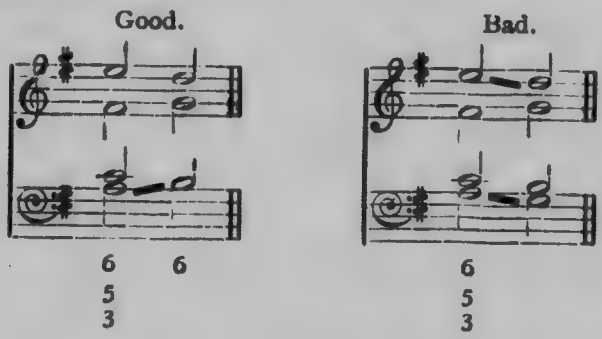
(i.) To a common chord on the tonic (*a*);
(ii.) To a $\frac{6}{4}$ on the tonic (*b*);
(iii.) To an inversion of itself (*c*); or—

(iv.) The 9th may descend to the 8th (*d*), or rise to the 3rd of the root while the other parts remain stationary (*e*).

[The chord then becomes a dominant 7th, and is treated as such.]

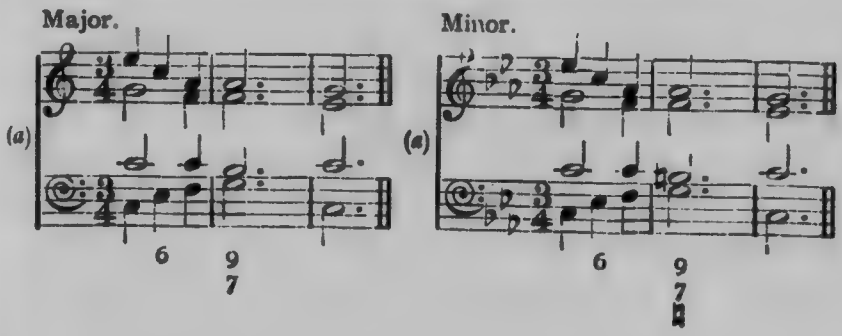
(v.) The 9th may leap downwards to the 3rd on the same bass (*f*).

If the 5th of the root is present in a chord of the major 9th which resolves on the tonic chord, it should *rise*, so as to avoid consecutives, *e.g.*:

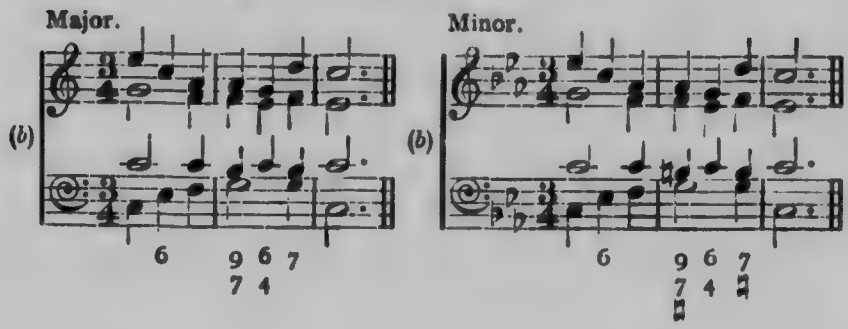


Examples showing the resolutions of the dominant 9th as given above.

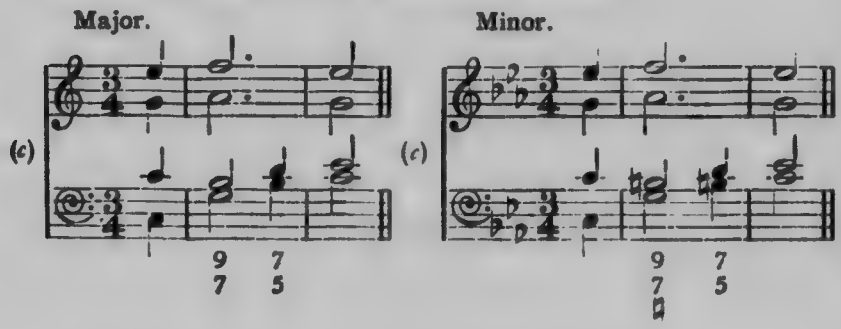
(i.) Resolving on to a common chord on the tonic:



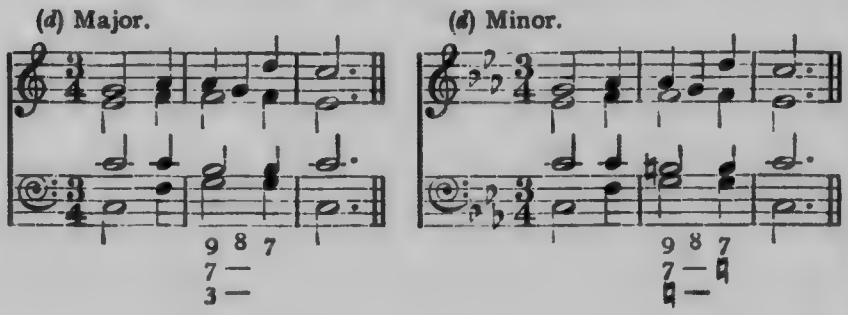
(ii.) Resolving on to a $\frac{6}{4}$ on the tonic:



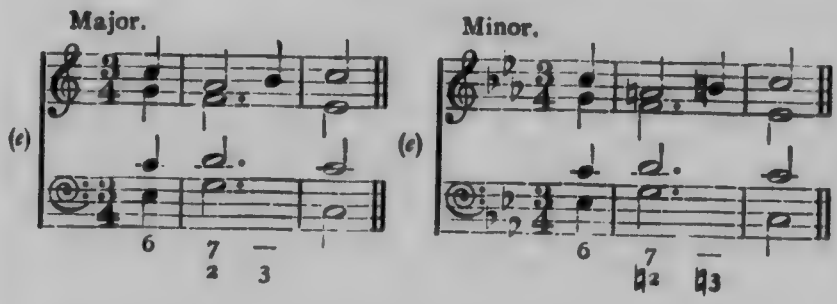
(iii.) Resolving on to an inversion of itself:



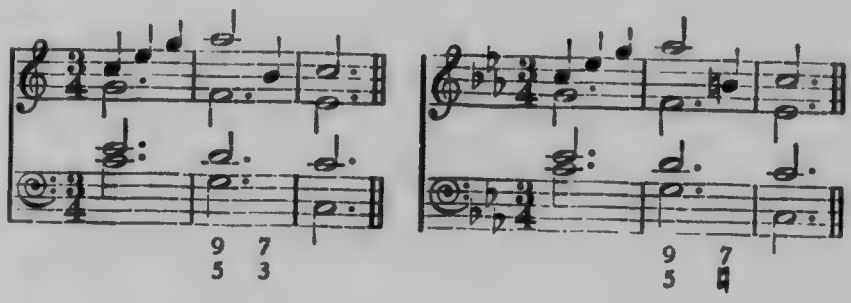
(iv.) 9th descends to 8th, other parts stationary:



9th rises to 3rd of root, other parts stationary :



(v.) 9th leaps downwards to 3rd on same bass :



109. The first inversion of the dominant major 9th, having the leading-note as its bass, is called the Chord of the Leading 7th.

When the 9th is minor the 1st inversion is called the Chord of the Diminished 7th.

The figuring of these chords and their inversions (§107 (*a*) and (*b*)) is identical with that of the dominant 7th, but the *quality* of the intervals differs.

The following short extracts illustrate the use of the dominant 9th:

(a) CHOPIN (Valse).

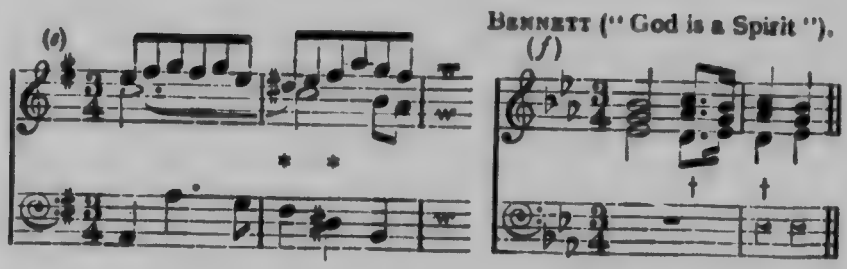
See §108 (iv.). *See* §108 (iv.).

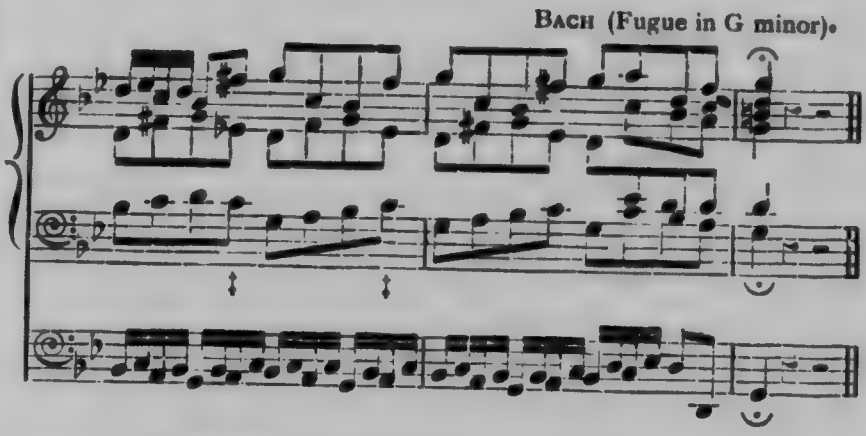
(b)

(c)

(d) STERNDALE BENNETT ("May Queen").

* Auxiliary note. † 9th rises to 3rd.
‡ 9th ornamentally resolved on 3rd. § 3rd inversion of dominant 9th.





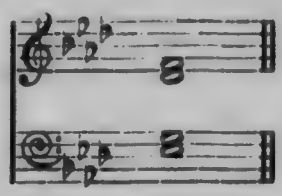
Questions and Exercises on Chapter XIV.

1. What is a dominant 9th?
   Write an example *in the key* of F, and also *on* F. Give the key-signatures, and resolve each chord.
2. What note is usually omitted in the chord of the dominant 9th (i.) in its root position, (ii) in its inversions?
3. What is the difference between a fundamental 9th, a suspended 9th, and an auxiliary 9th?
4. Write the four inversions of the chord of the dominant 9th in the keys of F, B♭, and E.

---

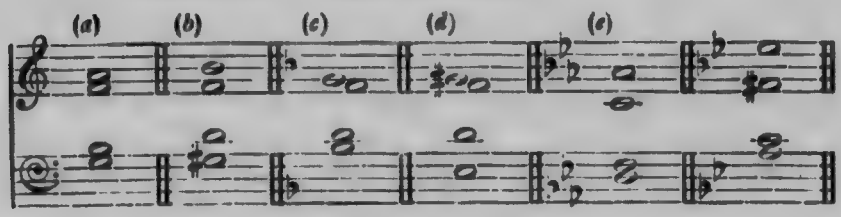
* Inversions. † The "leading 7th."
‡ 1st inversion of a diminished 7th.

5. Resolve the following chord (i.) on to its tonic, (ii.) on to a ♮ on the tonic, (iii.) on to an inversion of itself:

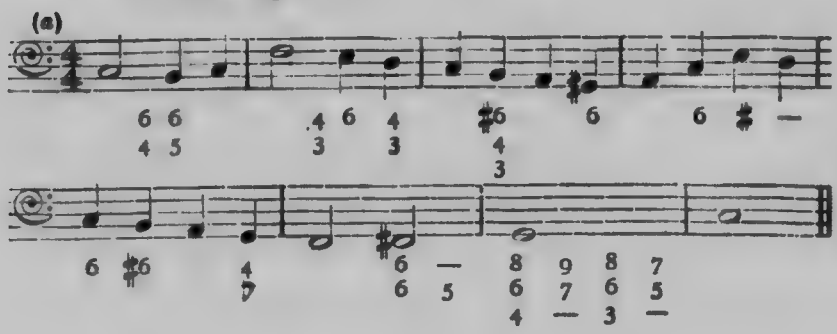


6. What is the difference between a "leading 7th" and a diminished 7th? Illustrate your answer in the key of B♭.

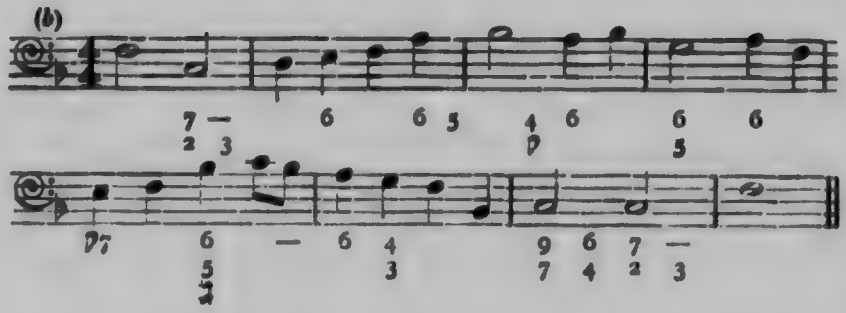
7. Write a chord before each of the following, and give its resolution. Figure the result:



8. Add three parts to the following bass in accordance with the figures:



(b)



9. Harmonize the following in four parts, introducing the dominant 9th and its inversions where possible:

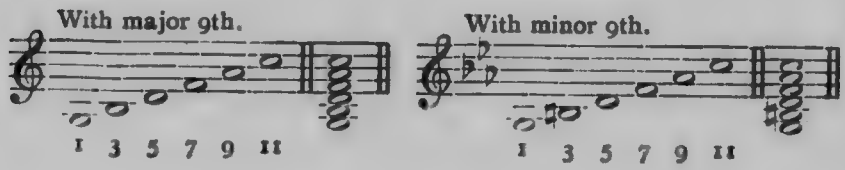
(a)

(b)

CHAPTER XV.

THE DOMINANT ELEVENTH.

110. The chord of the 11th is formed by adding a 3rd to the fundamental discord of the $\frac{9}{7}$. It contains a major 3rd, a perfect 5th, a minor 7th, a major or minor 9th, and a perfect 11th:



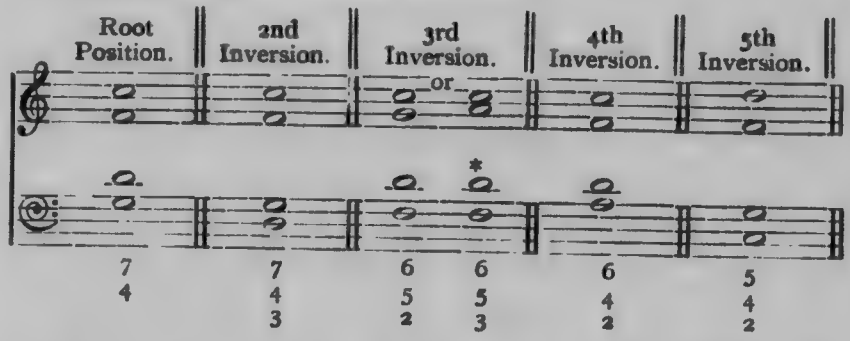
111. The 11th may appear in any part at the distance of a 4th, or 11th, from the root.

Being a fundamental discord the dominant 11th may be taken without preparation, but must resolve. Its most natural resolution is on to the 3rd of the root. For this reason the 3rd is omitted from the chord, since the note of resolution should not be sounded with the dissonance.

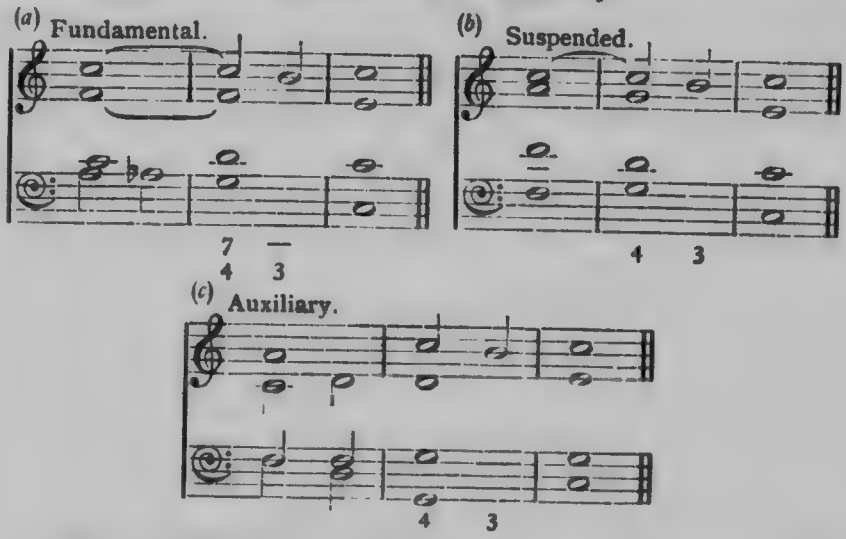
112. Both the major and minor forms of this chord are available in a minor key, but a major 9th should not appear in a chord of the 11th in a minor key.

113. The chord of the 11th in its complete form consists of six notes, and is capable of five inversions. The 1st inversion is rarely used, for the reason given in §111.

The other inversions are as follows:



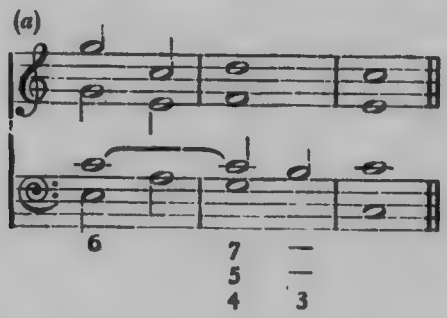
114. In addition to the 3rd, the 5th is often omitted from the chord, the 11th, 9th, and 7th being retained. As in the case of the 9th, the presence of the 7th enabled us to distinguish between a fundamental 9th, a suspended 9th, and an auxiliary 9th (*see* § 106), so the presence or absence of that same interval, in the chord of the 11th, decides whether the 11th is fundamental, suspended, or auxiliary:

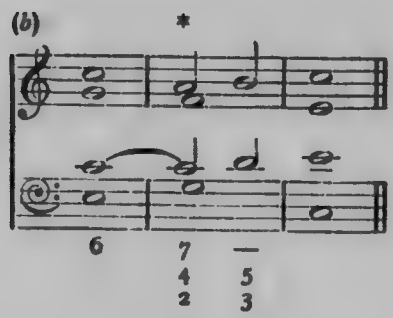


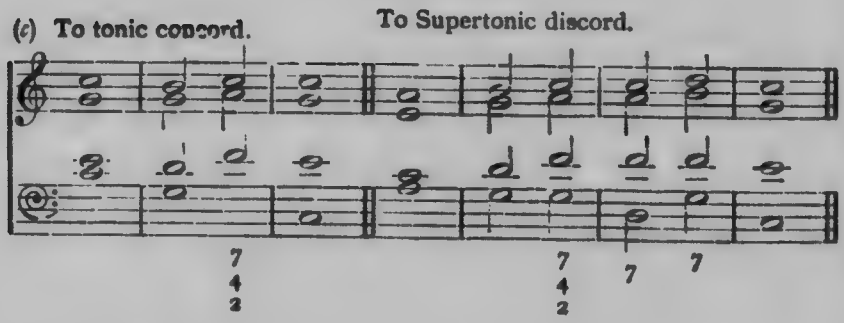
* *Generally known as the chord of the "added 6th," and frequently used in cadences. The 9th from the root may be major or minor.*

115. The dominant 11th resolves *either:*

(i.) Downwards to the 3rd (*a*); *or*— { while the other parts
(ii.) Upwards to the 5th (*b*) { remain; *or*—
(iii.) Remains to become part of the succeeding chord (either a tonic concord, or a supertonic discord (*c*)):



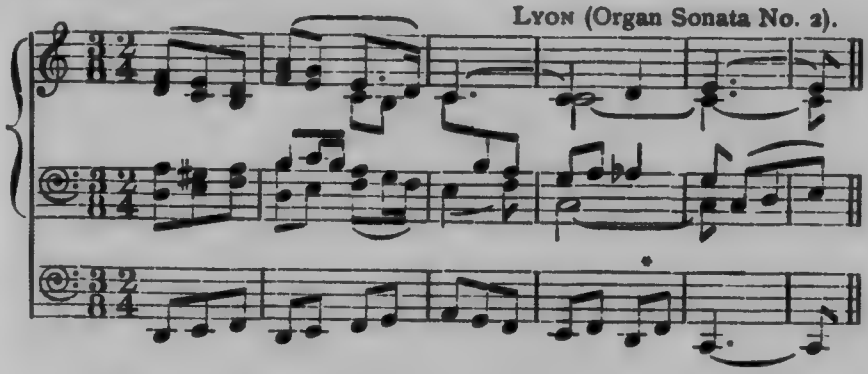




* *When the 11th ascends the 9th generally ascends with it.*

116. The 3rd inversion of the dominant 11th frequently resolves on to the tonic chord, and thus forms an authentic cadence (*see* §57 (*a*)):

LYON (Organ Sonata No. 2).



117. The chord of the 11th may be resolved ornamentally (*see* §54):

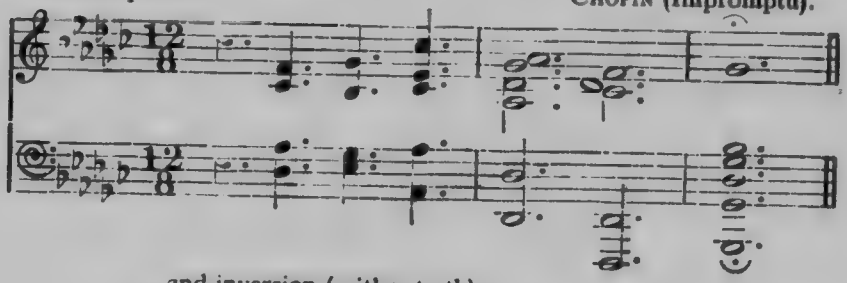
The following contain the chord of the dominant 11th, either in its root position or inverted:

Root position. SCHUMANN.

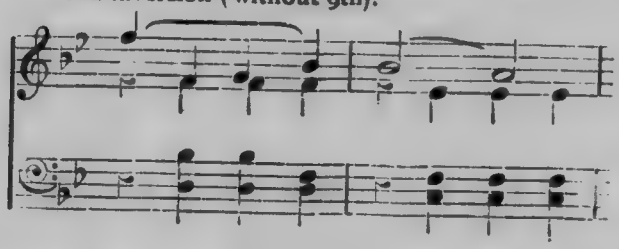
* (Added 6th) with minor 9th.

Root position.

CHOPIN (Impromptu).

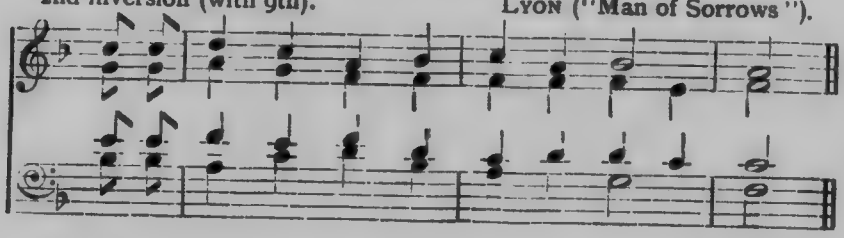


2nd inversion (without 9th).



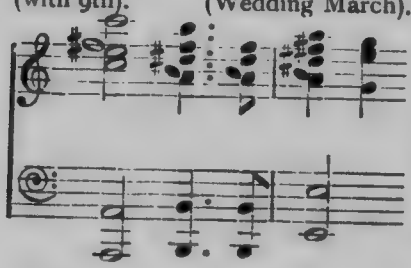
2nd inversion (with 9th).

LYON ("Man of Sorrows").

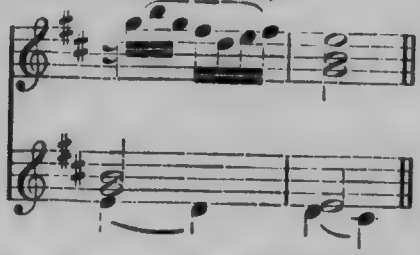


3rd inversion (with 9th).

MENDELSSOHN (Wedding March).



5th inversion (with 9th).



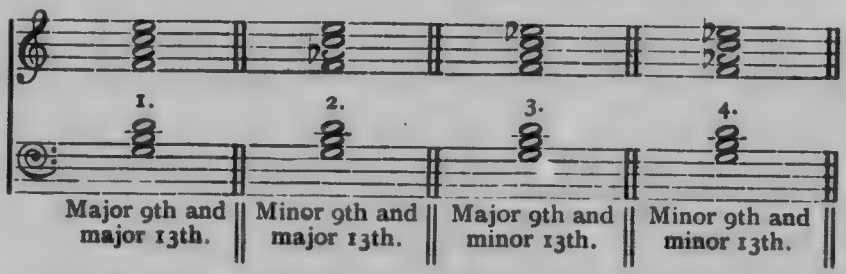
[Questions and Exercises on this chapter will be found at the end of Chapter XVI.]

CHAPTER XVI.

THE DOMINANT THIRTEENTH.

118. The chord of the dominant 13th is formed by adding the major, or minor 3rd, to the chord of the dominant 11th.

Since the 9th may be major or minor (*see* §110) it follows that four different varieties of the chord are available:



Any of the above chords may be used in a major key, but the first three are rarely met with in a minor key.

119. The complete chord of the 13th consists of seven notes, but three of these notes define the chord. It is seldom that more than four are used simultaneously.

120. The most useful note combinations of the chord of the dominant 13th are:

(i.) Root, 3rd, and 13th.
(ii.) Root, 3rd, 7th, and 13th.

Many other combinations are of course possible, *e.g.*:

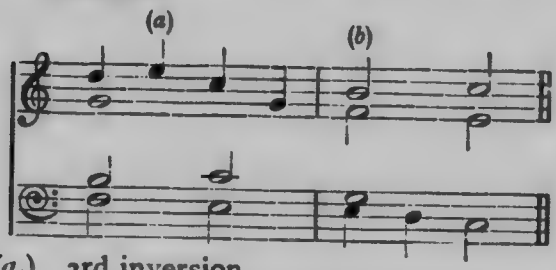
Root, 3rd, 9th, and 13th.
Root, 7th, 9th, and 13th.
Root, 7th, 11th, and 13th.
3rd, 7th, 9th, and 13th.
7th, 9th, 11th, and 13th.

121. The following points should be noted:

(i.) The figure 6 is used to indicate the 13th.

(ii.) The 5th should not be sounded with the 13th (*see* §111).

(iii.) When the 7th is included in the chord, the 13th should appear *above* it, except in the last inversion.



(*a.*) 3rd inversion.
(*b.*) Last inversion, 13th *below* 7th.

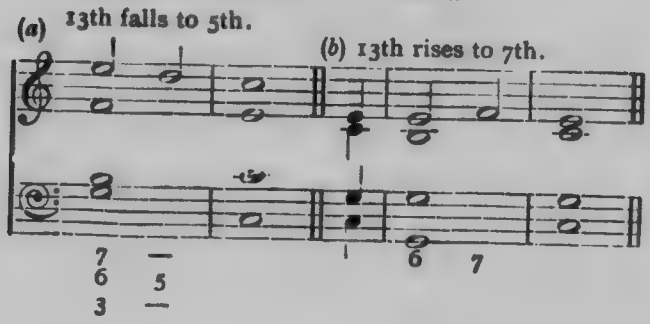
[*The student will find many instances, in the works of modern composers, of the 13th sounded below the 7th, but for the present the above rules should be adhered to.*]

122. The chord of the dominant 13th resolves either:

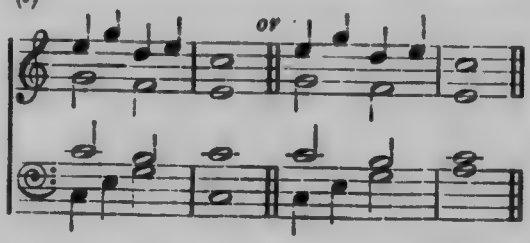
(i.) To another form of dominant chord (*the 13th falling to the 5th* (*a*), *or rising to the 7th* (*b*)); or—

(ii.) Direct to the tonic (*the 13th leaping downwards to the tonic* (*c*), *or remaining stationary* (*d*)); or—

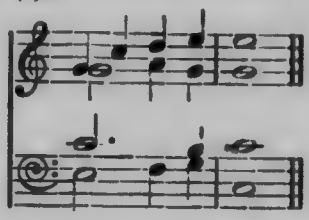
(iii.) By the 13th (in a minor key) ascending by step of a chromatic semitone (*e*) and (*f*):



13th leaps downwards to tonic. (c)



Remains to form part of new chord. (d)



13th rises to 3rd of tonic. (e)

Generally written as augmented 5th.* (f)

In examples (*a*) and (*c*) the 7th may be omitted and the root doubled.

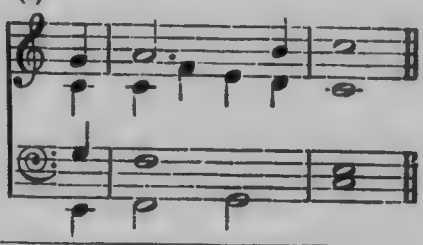
Inversions of the dominant 13th may be used in like manner to the fundamental discords previously explained, but it will be noted there can be no 2nd inversion (*see* §121 (ii.)).

[*The student should write out the inversions of the above chords.*]

123. The following examples show other varieties of the chord:

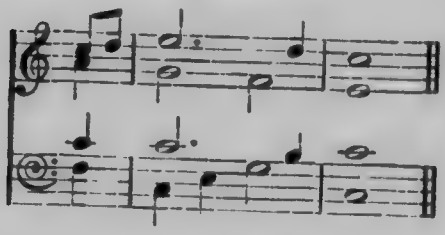
Root 3rd, 9th, and 13th. (a)

Root 7th, 9th, and 13th. (b)

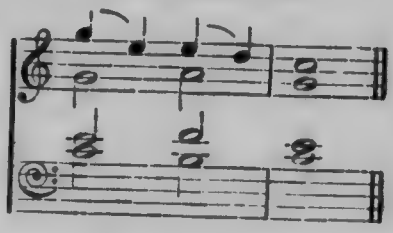


* *See* §67.

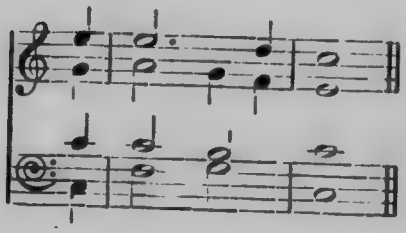
(*c*) Root 7th, 11th, and 13th.



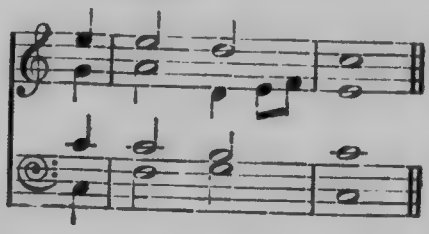
(*d*) 3rd, 7th, 9th, and 13th.



(*e*) 7th, 9th, 11th, and 13th.

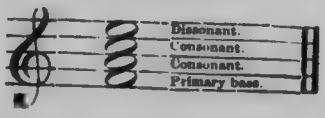


(*f*) 7th, 9th, 11th, and 13th (*as used by Bach*).



(*a*) 9th resolves before 13th.
(*b*) 9th rises (*see* §108 (*e*)).
(*c*) 11th treated as a suspension.
(*d*) 13th resolves before 9th.
(*e*) 9th resolves before 13th.
(*f*) 9th leaps downwards to 5th of next chord. This is allowable, because any note which is consonant with its primary bass is free in its progression.

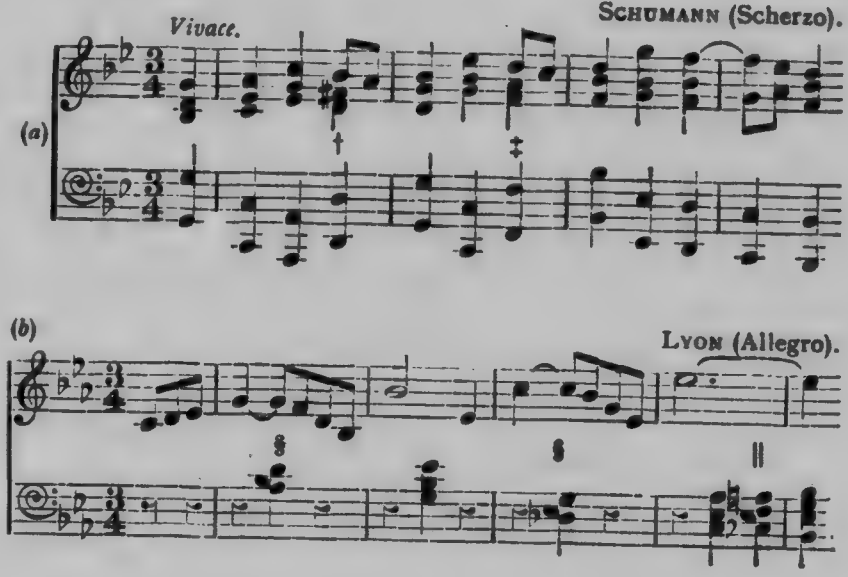
[*It will be noticed that when the chord of the 13th contains the 7th, 9th, 11th, and 13th, only one note, viz., the 13th, forms a dissonance with the primary bass*]:



The student should write the examples given above in the tonic minor.

124. The 13th may resolve ornamentally (*see* §54):

The following examples show the dominant 13th in various forms:



* The 13th leaps to the 3rd of the root.
† Minor 13th. ‡ Major 13th.
§ Showing root, 3rd, 7th, and 13th in 3rd inversion.
|| *See* §145 (*b*).

(c) LYON.

Ped.

(d) LYON ("Stormwrack").

(e) LYON ("Mirage").

* Root, 3rd, 7th, and 13th. † Root, 3rd, 7th, major 9th, and major 13th.
‡ Illustrates §122 (*f*).

CHOPIN (Mazurka).

(f)

LYON (Melomime I., "Toinette").

(g)

(h) *Allegretto.* CÉSAR FRANCK (Symphony).

Questions and Exercises on Chapters XV. and XVI.

1. Describe the formation of the chord of the dominant 11th and state how it is figured.

2. Write out the available inversions of the dominant 11th in the keys of A and D♭.

---

* 3rd, 7th, minor 9th, and major 13th.
† 3rd, 7th, major 9th, and major 13th.
‡ Root 3rd, 7th, and major 13th.

3. How is it possible to distinguish between an inversion of the dominant 11th and an essential discord of the 7th?

4. What is the difference between a fundamental 11th, a suspended 11th, and an auxiliary 11th?

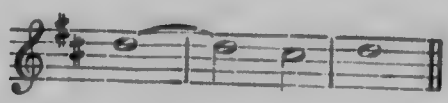
Illustrate your answer in the key of B♭.

5. What note is generally omitted in the chord of the 11th, and what note is usually included?

6. What interval should not appear in the chord of a dominant 11th in a minor key?

7. Harmonize the following melodic fragment:

(i.) As a fundamental 11th;
(ii.) As a suspended 11th:



8. When is it allowable for the 11th to ascend?

9. Write an ornamental resolution of the chord of the dominant 11th in the key of B♭.

10. By what name is the 3rd inversion of the dominant 11th known? Write a cadence introducing this chord in the key of F.

11. Describe the formation of the chord of the dominant 13th.

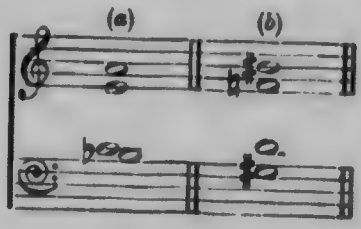
12. What notes are generally included in the chord when writing in four parts?

13. What note should rarely be sounded with the 13th? Give your reasons.

14. Resolve the chord of the 13th, in the key of F, in three different ways.

15. Write an illustration, in the key of B♭, of the 13th resolving on the 7th.

16. Give the roots and resolutions of the following chords:



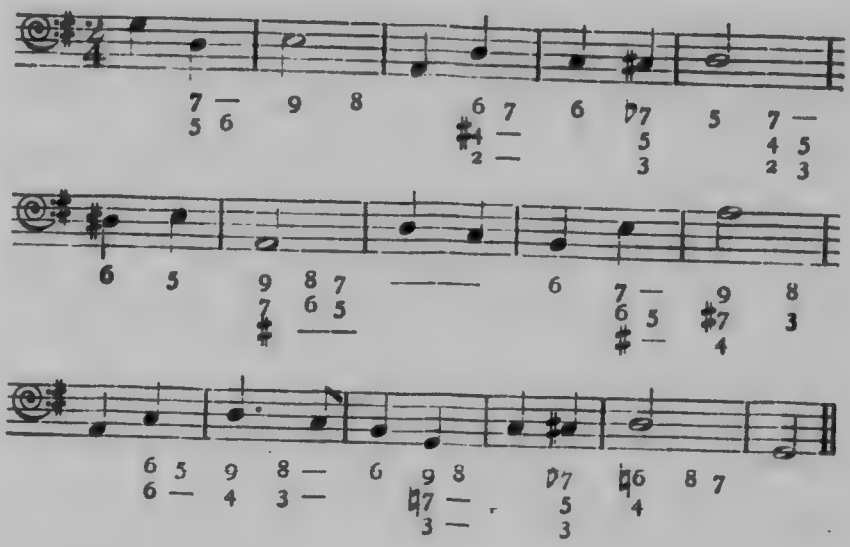
17. When the 7th, 9th, 11th, and 13th are included in the chord of the 13th, which notes are consonant? State why.

18. Give an example of the 13th, ornamentally resolved, in the key of G minor.

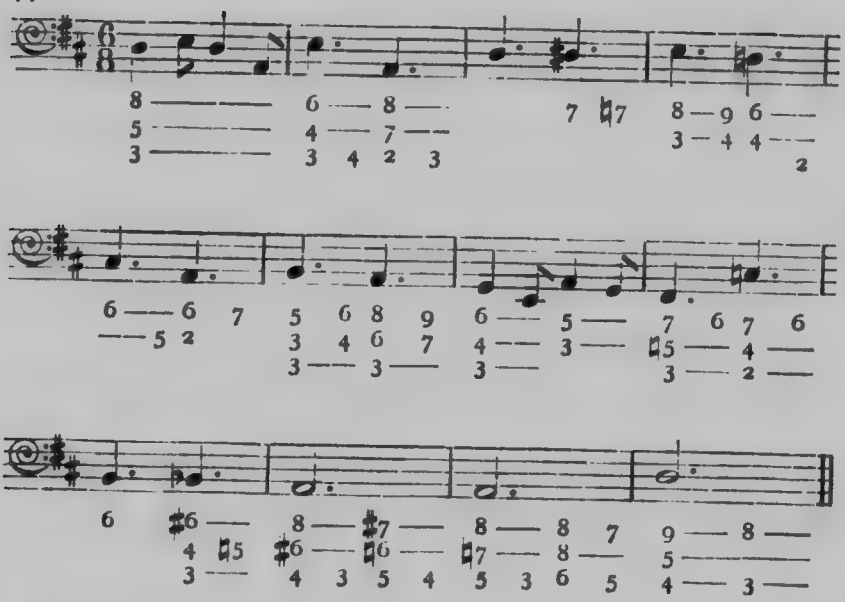
19. Write an illustration of the 13th remaining to form a part of the chord of resolution in the key of F.

20. Harmonize the following basses and melodies in four parts:

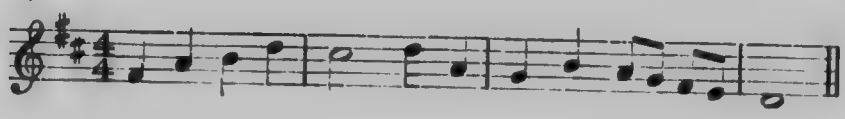
(a)



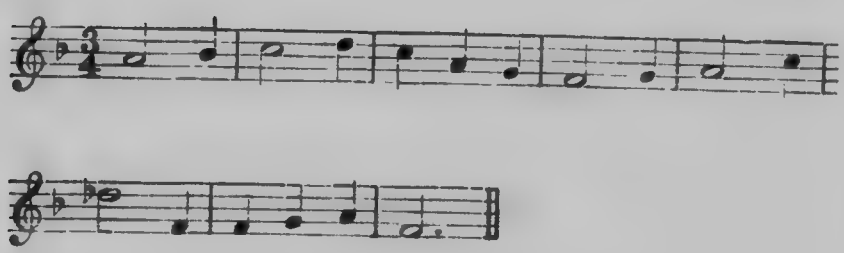
(b)



(c)



(d)



(e)

(f)

(g)

CHAPTER XVII.

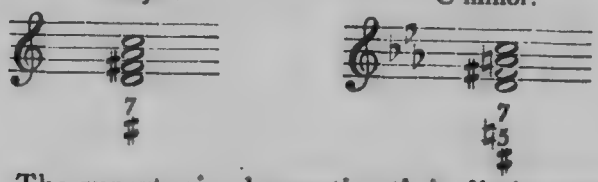
CHROMATIC FUNDAMENTAL DISCORDS.

125. Chromatic chords of the 7th, 9th, 11th, and 13th may be taken on the supertonic and tonic in both major and minor keys.

The Supertonic Chromatic 7th.

126. This chord consists of the major triad on the supertonic, with the minor 7th added (*see* §68):

C major. C minor.

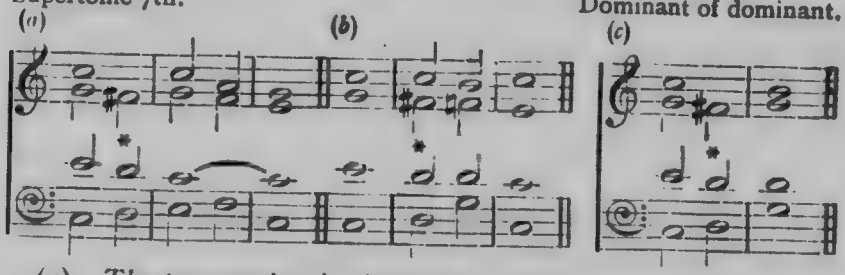


127. The supertonic chromatic 7th is distinguished from the dominant 7th of the dominant by the manner in which it is quitted. All its inversions may be used.

128. To avoid modulation the supertonic chromatic 7th should be followed by either:

(i.) Some form of tonic harmony (*a*); or—
(ii.) A chord containing the diatonic 4th of the key (*b*):

Supertonic 7th. Dominant of dominant.



(*a*) *The progression is chromatic. Resolves on 1st inversion of tonic (7th remains stationary and 3rd rises a semitone).*

(*b*) *The progression is chromatic. Resolves on dominant discord (7th and 3rd descend a semitone. 3rd descends to diatonic 4th of key).*

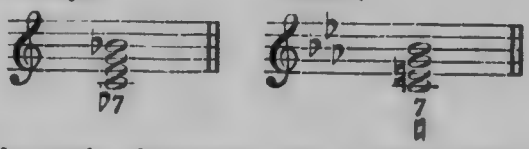
(*c*) *The progression is diatonic. Modulation to dominant.*

129. It will be noticed that the rules for the resolution of a chromatic 7th on the supertonic are similar to those which govern the chromatic triad on the supertonic (*see* §69).

The Tonic Chromatic 7th.

130. This chord consists of the major triad on the tonic with the minor 7th added:

C major. C minor.

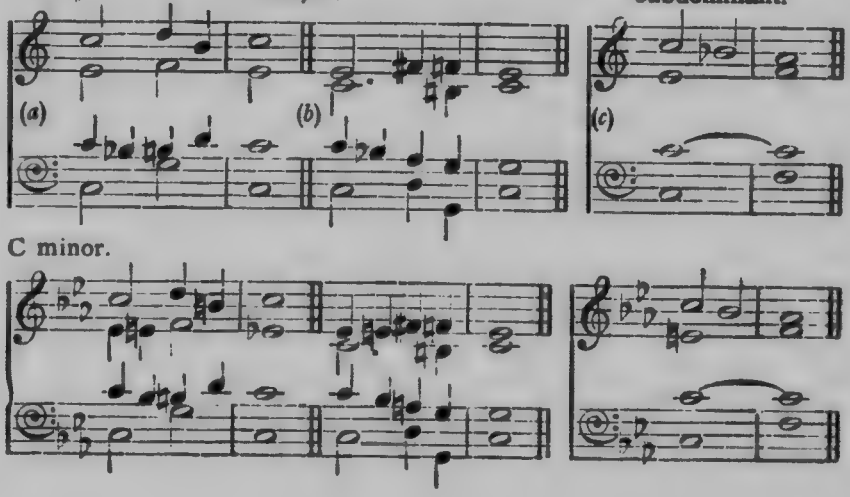


131. The tonic chromatic 7th is distinguished from the dominant 7th of the subdominant by the manner in which it is quitted. All its inversions may be used.

132. To avoid modulation it should be followed by either:

(i.) A dominant discord; or—
(ii.) A supertonic discord.

C major. Tonic 7th. Dominant of subdominant.



(*a*) *The progression is chromatic. Resolves on dominant discord. 7th ascends a chromatic semitone. 3rd ascends a minor 2nd.*

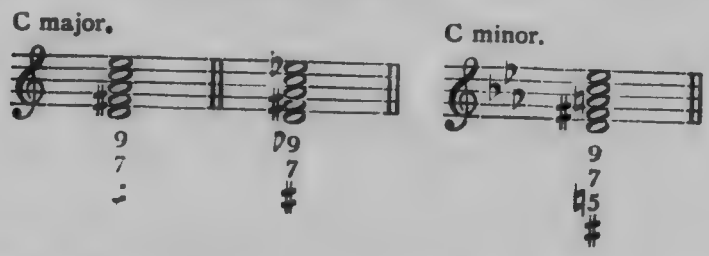
(*b*) *The progression is chromatic. Resolves on supertonic discord. 7th descends a semitone. 3rd rises a tone. Root becomes 7th of supertonic chord.*

(*c*) *The progression is diatonic. Modulation to subdominant.*

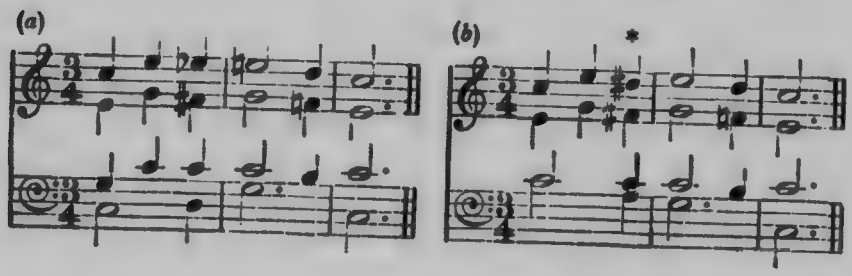
133. Both the supertonic chromatic 7th and the tonic chromatic 7th are taken without preparation.

The Supertonic Chromatic 9th.

134. A major or minor 9th may be added to the chord of the supertonic chromatic 7th:

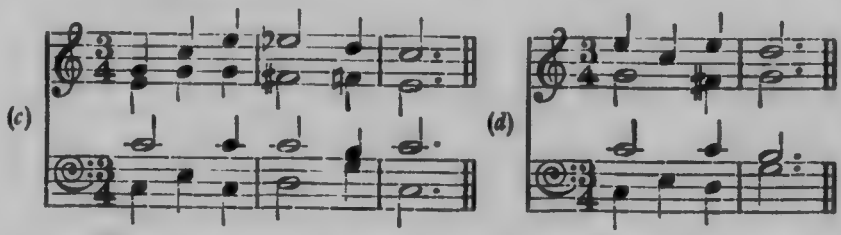


135. The supertonic chromatic 9th may be used in its root position and in its inversions, and is subject to the same rules which govern the supertonic chromatic 7th (*see* §§127-128):



(*a*) *The progression is chromatic. Resolves on 2nd inversion of tonic (9th ascends a chromatic semitone, 7th remains stationary).*

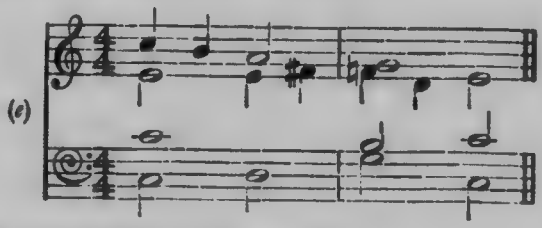
(*b*) *In the inversions the 9th is usually written as an augmented 8th.**



(*c*) *The progression is chromatic. Resolves on dominant discord (9th and 7th descend a semitone. 3rd descends chromatically to diatonic 4th of key).*

(*d*) *The progression is diatonic. Modulation to dominant.*

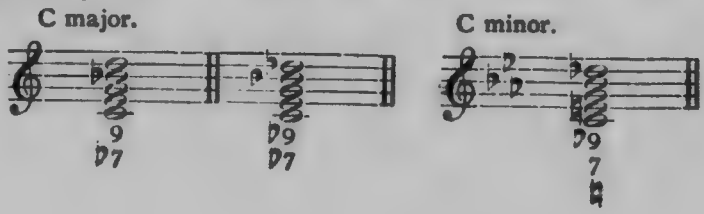
Example of 9th rising (*see* §108 (*e*)):



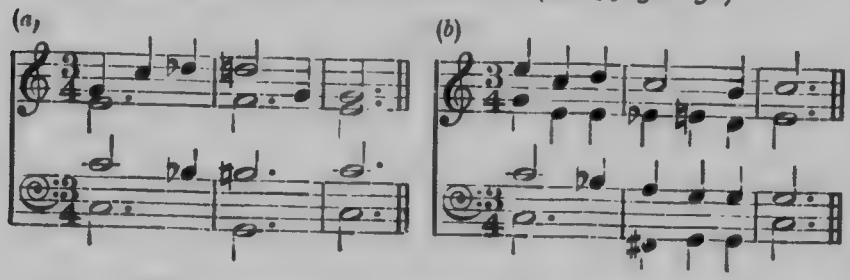
(*e*) *The progression is chromatic.*

The Tonic Chromatic 9th.

136. A major or minor 9th may be added to the tonic chromatic 7th:



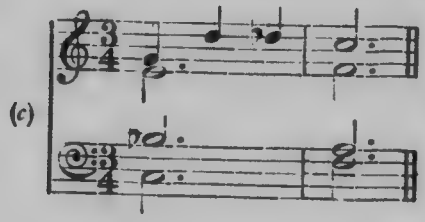
137. The tonic chromatic 9th may be used in its root position and in its inversions, and is subject to the rules which govern the tonic chromatic 7th (*see* §§131-132).



(*a*) *The progression is chromatic. Resolves on dominant discord.* (*9th and 7th rise a chromatic semitone; 3rd rises a semitone.*)

(*b*) *The progression is chromatic. Resolves on supertonic discord.* (*9th descends a tone, 7th a semitone, and 3rd a chromatic semitone.*)

Diatonic progression, involving modulation to subdominant:



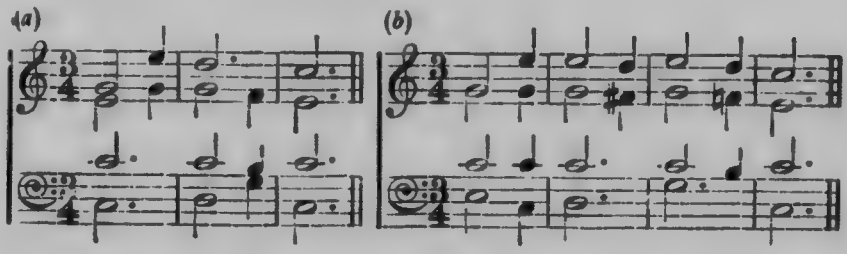
The Supertonic Chromatic 11th.

138. The 11th may be added to the chromatic fundamental discord on the supertonic in both major and minor keys.

139. It may be used in its root position, and in its inversions, except the 1st (*see* §113).

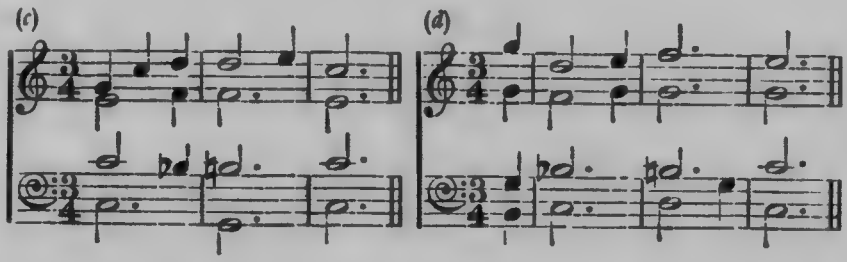
The tonic chromatic 11th may be treated in like manner, but both chords are rarely used.

The following are examples:



(*a*) Supertonic 11th. (*11th resolves on 7th of dominant discord.*)

(*b*) Supertonic 11th. (*Resolves on another form of supertonic chromatic discord.*)



(*c*) Tonic 11th. (*11th remains stationary to form part of dominant discord.*)

(*d*) Tonic 11th. (*11th rises to form part of tonic discord.*)

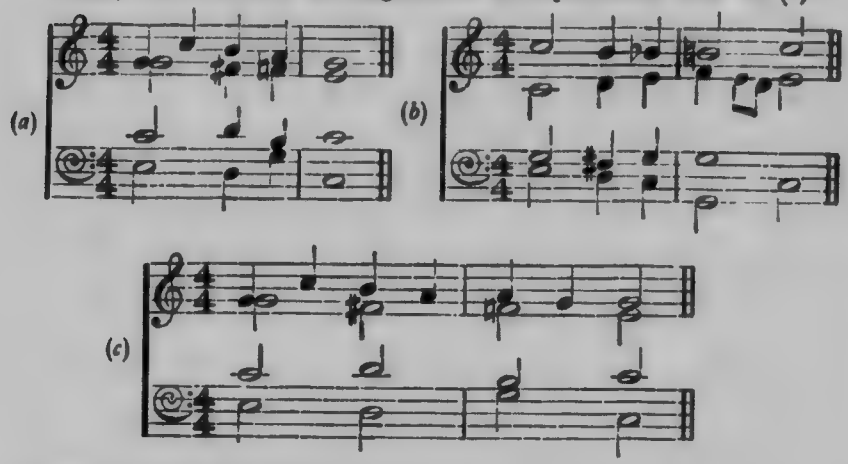
The Supertonic and Tonic Chromatic 13th.

140. The major or minor 13th may be added to supertonic or tonic discords in both major and minor keys.

141. Both are subject to the same rules as the dominant 13th (*see* Chapter XVI.).

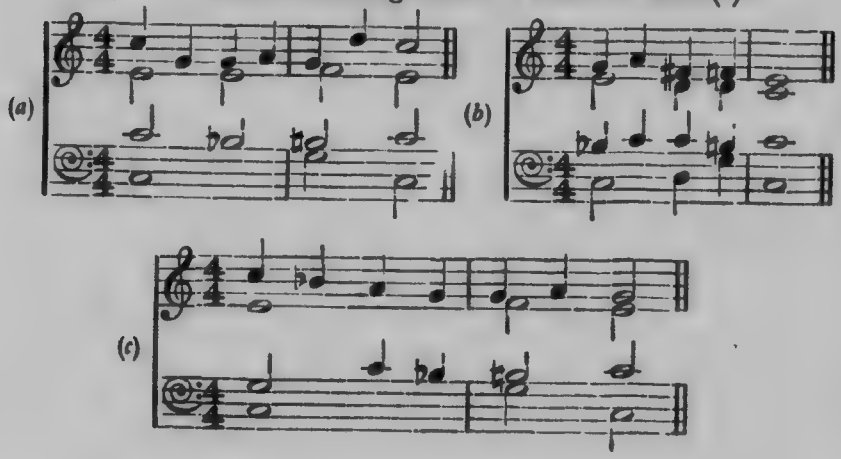
142. The chord of the supertonic chromatic 13th resolves either:

(i.) On a dominant discord (*a*); or—
(ii.) On a tonic discord (*b*); or—
(iii.) On another arrangement of supertonic discord (*c*):



143. The chord of the tonic chromatic 13th resolves either:

(i.) On a dominant discord (*a*); or—
(ii.) On a supertonic discord (*b*); or—
(iii.) On another arrangement of tonic discord (*c*):



Questions and Exercises on Chapter XVII.

1. Write and resolve a supertonic chromatic 7th in the key of E♭.

2. How is it possible to distinguish a chord of the supertonic 7th from the dominant 7th of the dominant?

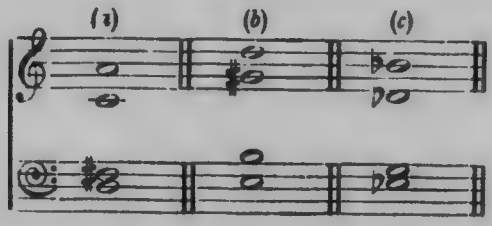
3. What progressions are necessary, if modulation to the dominant is to be avoided, in resolving a chord of the supertonic 7th?

4. Resolve the following chords:

   (i.) As a chromatic supertonic 7th;

   (ii.) As a dominant 7th.

   Give the key-signature in each case:



5. By what chord should a tonic chromatic 7th be followed, in order to avoid modulation?

6. Give an example of a supertonic 9th in the key of A. Resolve it:

   (i.) On to some form of tonic harmony;

   (ii.) On to a chord containing the subdominant of the key.

7. Write the tonic chromatic 9th in the key of B♭. Resolve it in two different ways, and figure the result.

8. What inversion of the chord of the 11th is not generally used? Give a reason.

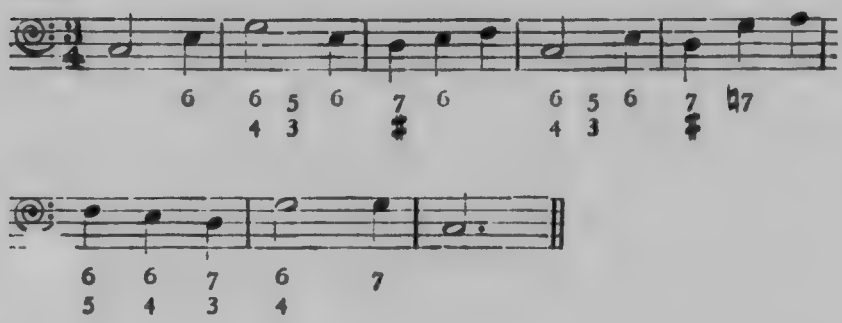
9. Write a supertonic 13th and a tonic 13th in the key of G, and resolve them :

   (i.) On to a dominant discord ;

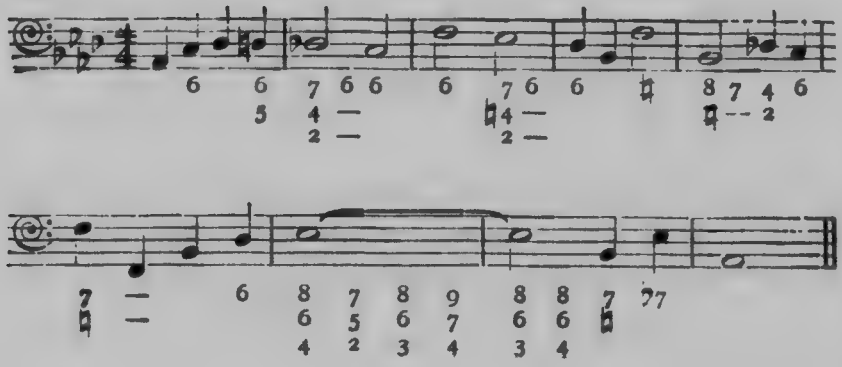
   (ii.) On another arrangement of the same chord.

10. Harmonize the following basses and melodies, introducing supertonic and tonic chromatic 7ths, 9ths, 11ths, and 13ths ;

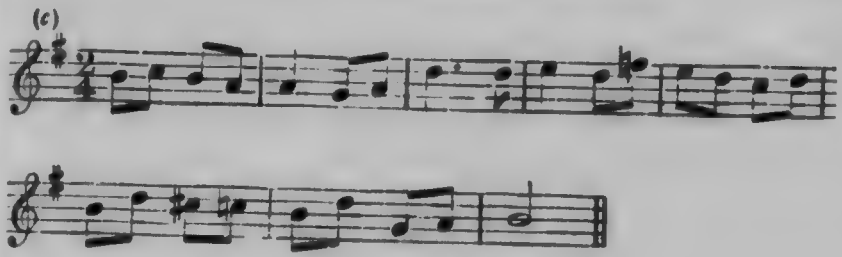
(a)



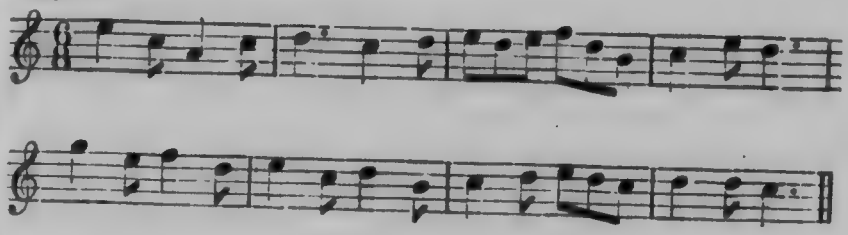
(b)



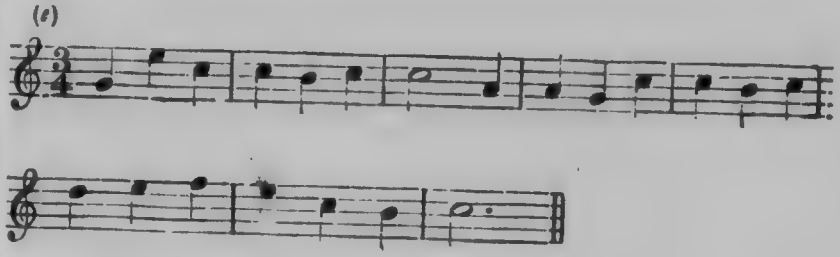
(c)



(d)



(e)

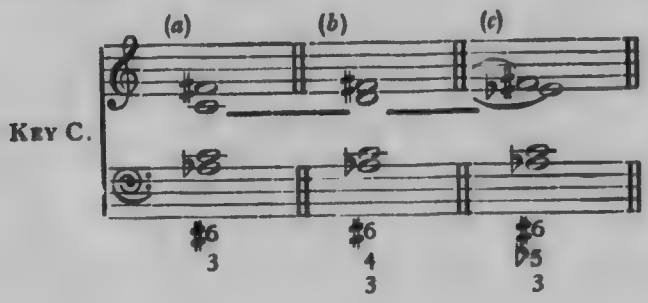


CHAPTER XVIII.

THE AUGMENTED SIXTH.

144. The chord of the augmented 6th is usually found on the minor 6th, and, occasionally, on the flattened 2nd of a major or minor scale.

145. There are three varieties of this chord, generally known as the Italian, French, and German 6th:



(*a*) Italian 6th, formed by adding the major 3rd and the augmented 6th to the minor 6th of the scale.

(*b*) French 6th, formed by adding the major 3rd, perfect 4th, and augmented 6th to the minor 6th of the scale.

(*c*) German 6th, formed by adding the major 3rd, perfect 5th, and augmented 6th to the minor 6th of the scale.

146. The augmented 6th is merely a chromatically altered chord, but for examination purposes it is supposed to be double rooted.

These roots are explained thus:

The Italian 6th consists of a minor 9th on the dominant and the 3rd and 7th of a supertonic 7th.

E.g., Key of C.
- F♯ is the 3rd of a supertonic chromatic 7th } root D.
- C is the 7th of a supertonic chromatic 7th } root D.
- A♭ is the minor 9th on the dominant, root G.

see §145 (*a*).

[*In harmony of more than four parts the 3rd is doubled in the Italian and German forms of the augmented 6th. The 4th is doubled in the French form.*]

The French 6th consists of a minor 9th on the dominant, and the root, 3rd, and 7th of a supertonic chromatic 7th.

E.g., Key of C.
- F♯ is the 3rd of a supertonic chromatic 7th
- D is the root of a supertonic chromatic 7th } root D.
- C is the 7th of a supertonic chromatic 7th } root D.
- A♭ is the minor 9th on the dominant, root G.

see §145 (*b*).

The German 6th consists of a minor 9th on the dominant, and the 3rd, 7th, and minor 9th of a supertonic chromatic 9th.

E.g., Key of C.
- F♯ is the 3rd of a supertonic chromatic 9th
- E♭ is the 9th of a supertonic chromatic 9th } root D.
- C is the 7th of a supertonic chromatic 9th } root D.
- A♭ is the minor 9th on the dominant, root G.

see §145 (*c*).

Some theorists explain the derivation of these roots in the following manner:

KEY C.

A♭ is the minor 9th on the dominant ..
E♭ is the minor 13th on the dominant .. } root G.
C is the perfect 11th on the dominant ..

D is the root of a major supertonic triad ..
F♯ is the 3rd of a major supertonic triad .. } root D.

147. The chord of the augmented 6th resolves either:

(i.) On tonic harmony (*a*); or—

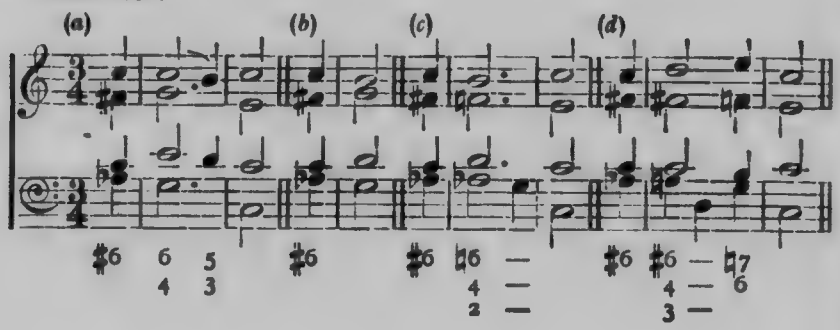
(ii.) On dominant harmony (*b*); or—

(iii.) On a dominant discord (*c*); or—

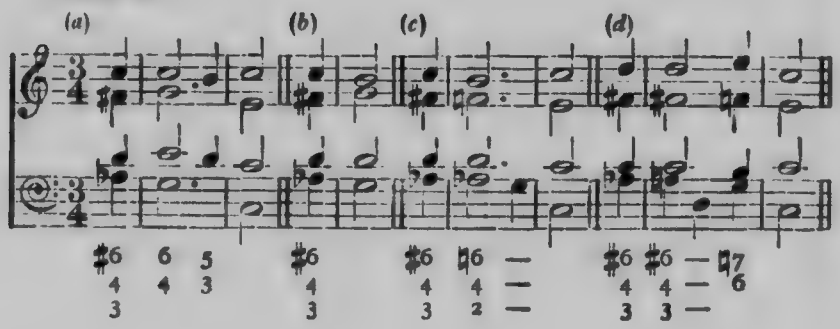
(iv.) On a supertonic discord (*d*).

Examples in the key of C:

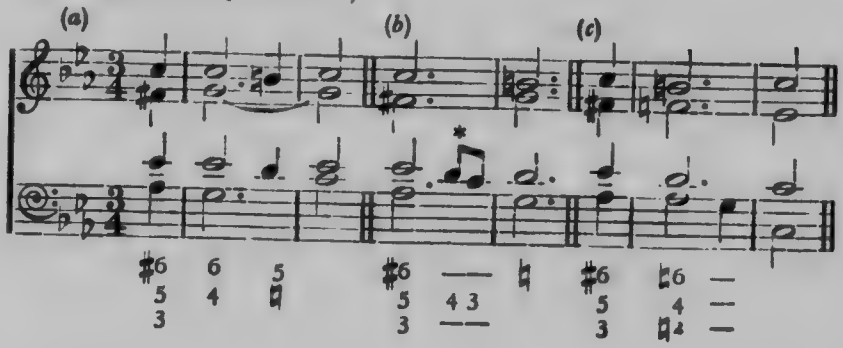
Italian 6th.

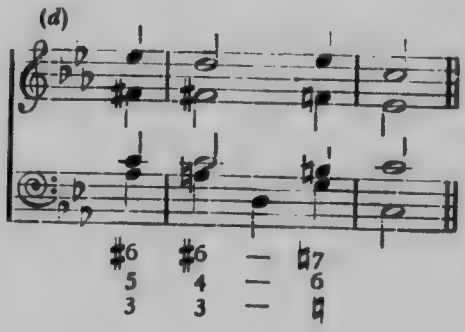


French 6th.



German 6th. (Key C minor.)





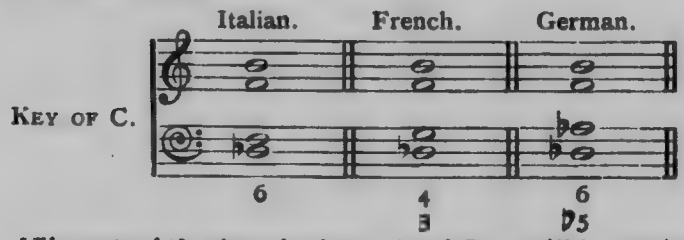
In the above examples it will be noticed:

(i.) *The 3rd is doubled in the Italian 6th.*

(ii.) *The notes forming the augmented 6th move in contrary motion at (a) and (b).*

(iii.) *Consecutive 5ths result when the German 6th is resolved on the dominant. They are avoided by resolving the 5th before the primary bass of the chord (b*), when the chord becomes a French 6th and an Italian 6th in turn.*

The augmented 6th on the flattened 2nd of the scale resolves in like manner to the augmented 6th already described; but whereas the latter resolves on to a major dominant chord, the former resolves on to either a major or a minor tonic chord.

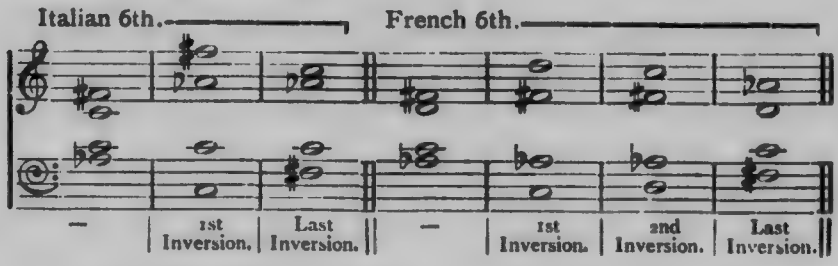


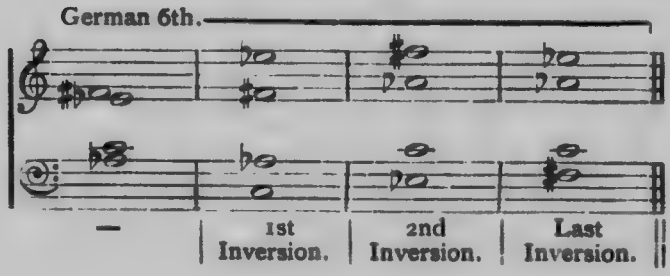
[*The roots of the above chords are C and G, as will be seen from* §146.]

148. All the inversions of the chord of the augmented 6th are possible, though the last is rarely used.

As a general rule, the notes which form the interval of the augmented 6th are not inverted in the inversions (except of course in the last inversion). These notes should resolve as in the original position of the chord.

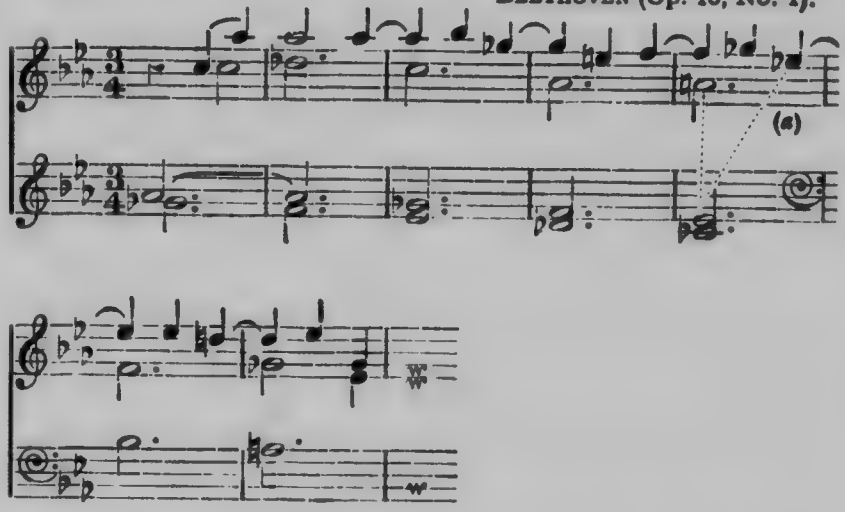
The following example shows the inversions of the several varieties of this chord:



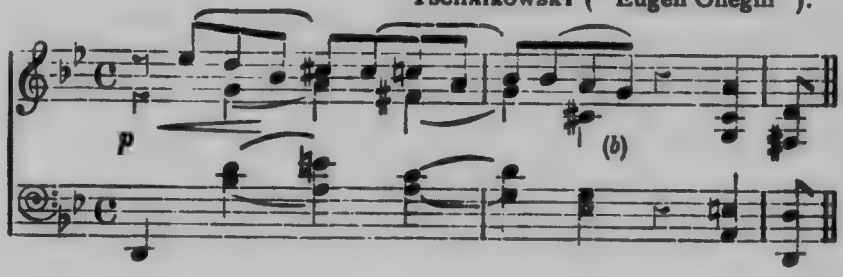


149. Illustration of the use of the chord of the augmented 6th:

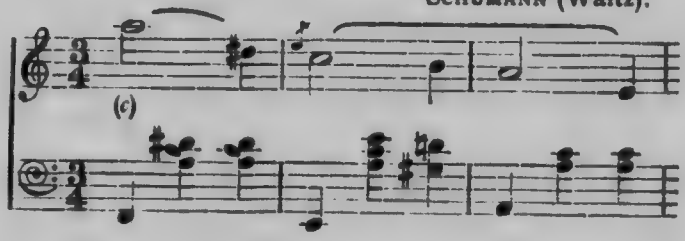
BEETHOVEN (Op. 10, No. 1).



TSCHAIKOWSKY ("Eugen Onegin").

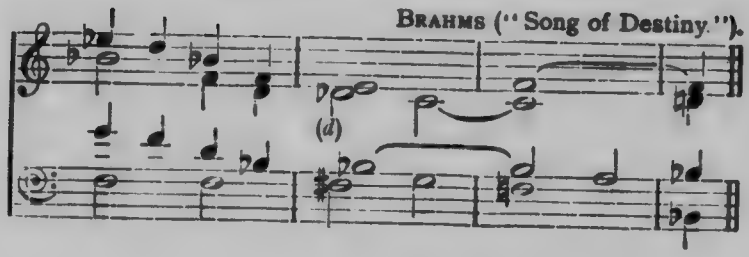


SCHUMANN (Waltz).

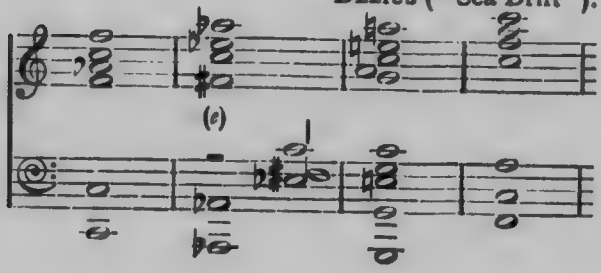


F.

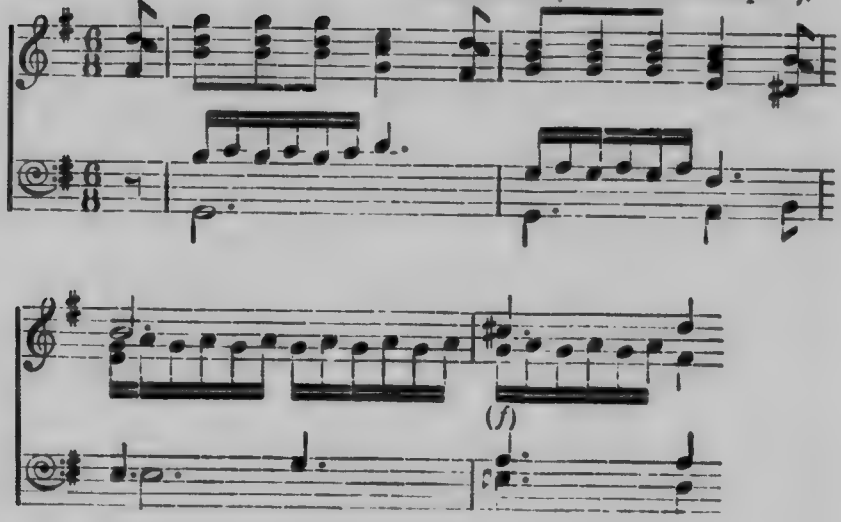
BRAHMS ("Song of Destiny").



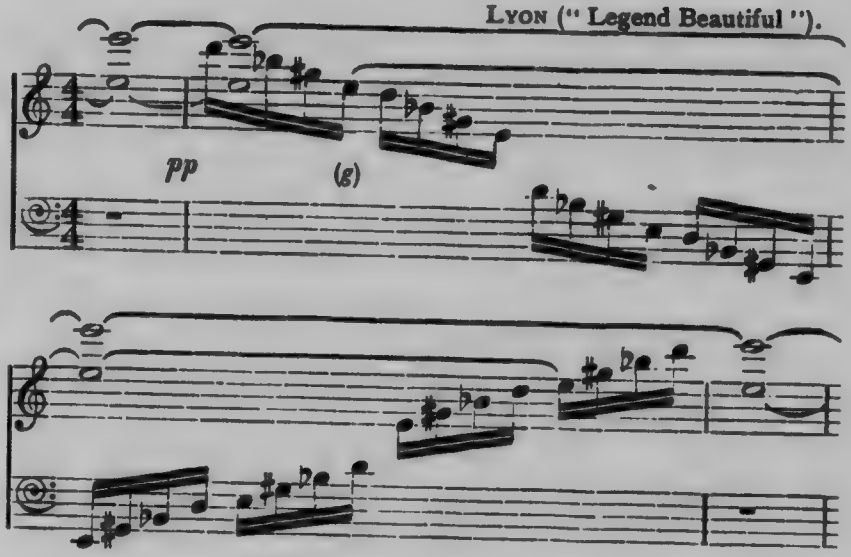
DELIUS ("Sea Drift").



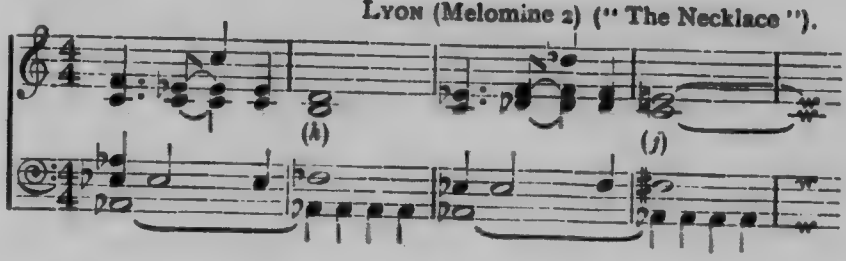
STANFORD ("God is our Hope").



LYON ("Legend Beautiful").



LYON (Melomine 2) ("The Necklace").



(*a*) Italian 6th. Key of E♭.

(*b*) French 6th, proceeding to Italian 6th. Key G minor.

(*c*) German 6th. Key A minor.

(*d*) German 6th. Key of B♭. The F♯ in the bass is a sensible false notation.

(*e*) German 6th. Key of C.

(*f*) French 6th. Key of G.

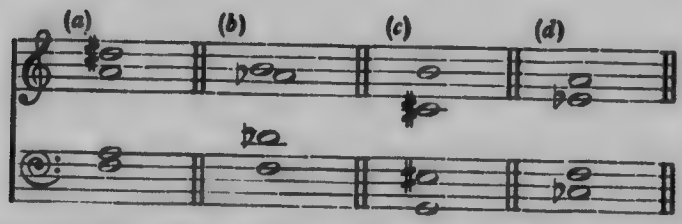
(*g*) 2nd inversion of French 6th, with characteristic note of French 6th sustained.

(*h*) 1st inversion of German 6th. The B in the alto is false notation for C♭. Key of A♭.

(*j*) Augmented 6th on A♭, with chromatically altered 5th.

Questions and Exercises on Chapter XVIII.

1. Describe the chord of the Augmented 6th. Upon which degree of the scale does it most frequently occur?
2. Write a chord of the German 6th in the key of B♭, and resolve it.
3. Resolve the following chords and give the key-signatures:



(*a*) *and* (*d*) *into minor keys*, (*b*) *and* (*c*) *into major keys.*

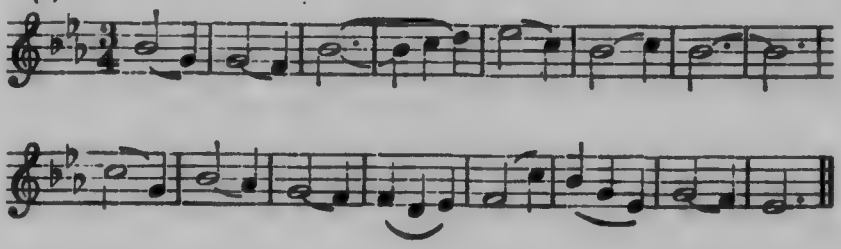
4. What intervals must appear in every form of Augmented 6th?
5. Take B as the uppermost note in a chord of a French 6th. Write the chord and resolve it. Give roots and key-signature.
6. Harmonize the following alto part, introducing a French 6th at *:

7. What note is doubled in the French 6th when writing in more than four parts?

8. Harmonize the following melodies, introducing the chords of the Augmented 6th:

(*a*)

(*b*)

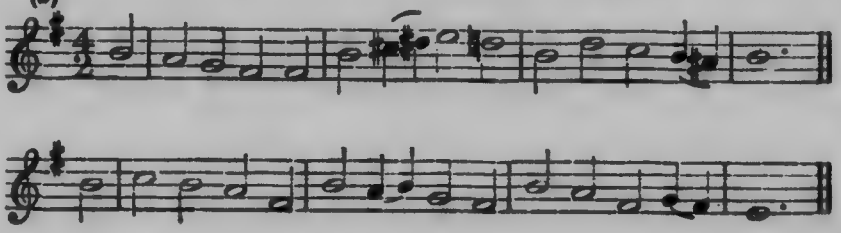


(*Introduce inversions of the Augmented 6th.*)

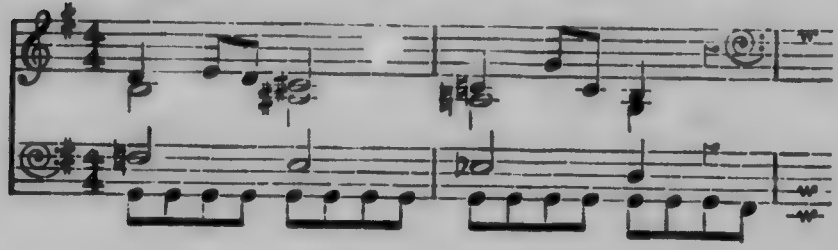
(*c*)

(*Introduce one Italian and one French 6th.*)

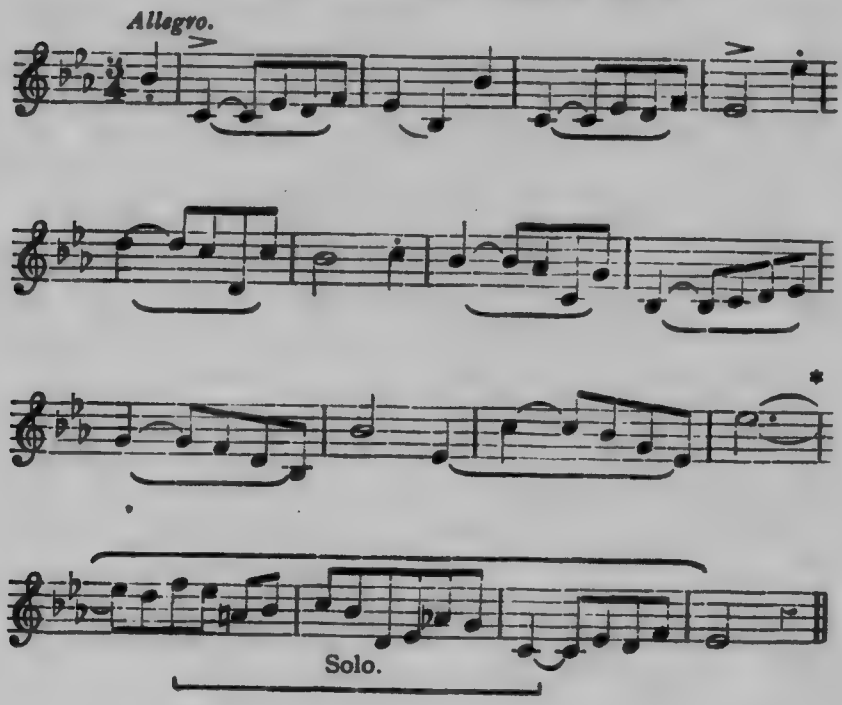
(*d*)



9. Add two bars to the following. Introduce a German 6th:



10. Harmonize the following in a free style, writing for the pianoforte. Introduce a French 6th at * :



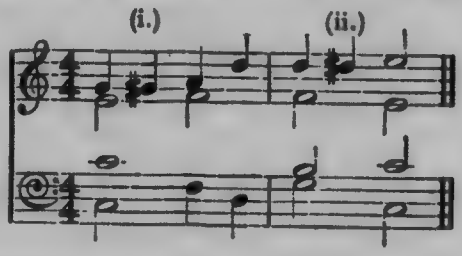
CHAPTER XIX.

CHROMATICALLY ALTERED CHORDS.

150. A note of a chord may be chromatically altered, a sharp indicating that such note should ascend and a flat indicating that it should descend.

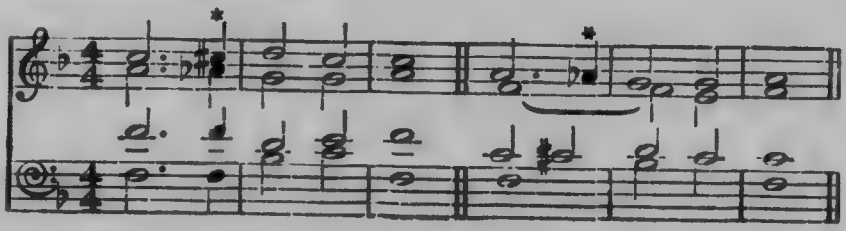
Since the progression of this chromatically altered note is fixed, it should not be doubled.

151. The most common of these chromatically altered chords is the Augmented 5th—usually on the tonic or dominant—to which is often added a minor 7th:

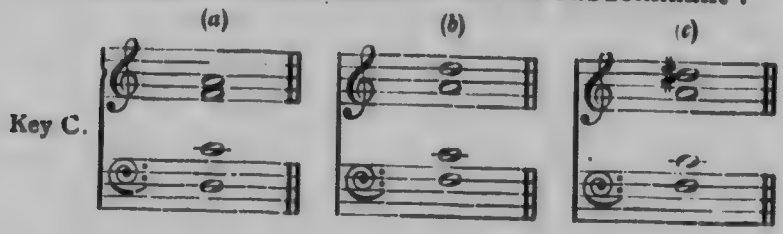


(i.) Augmented 5th on tonic.
(ii.) Augmented 5th on dominant with minor 7th added.

152. The following passages show two notes of a chord chromatically altered:



153. The 6th of the 2nd inversion of a secondary 7th on the supertonic (*see* §100) may be chromatically altered. It then becomes an Augmented 6th on the subdominant :



(*a*) *Secondary 7th on supertonic.*
(*b*) *1st inversion of same (known as "added 6th").*
(*c*) *"Added 6th" chromatically altered.*

It is useful in cadences, *e.g.*:

---

* The 3rd may be chromatically altered :

A good illustration of the use of this chord (*a*) will be found at the conclusion of Gounod's motet, "By Babylon's Wave."

CHAPTER XX.

MODULATION (Part II.).

154. When a modulation is made to any other than the five related keys (*see* §63) it is extraneous.

155. When a modulation is made to a remote key, and two or more transient modulations (*see* §66) occur, the modulation is compound:

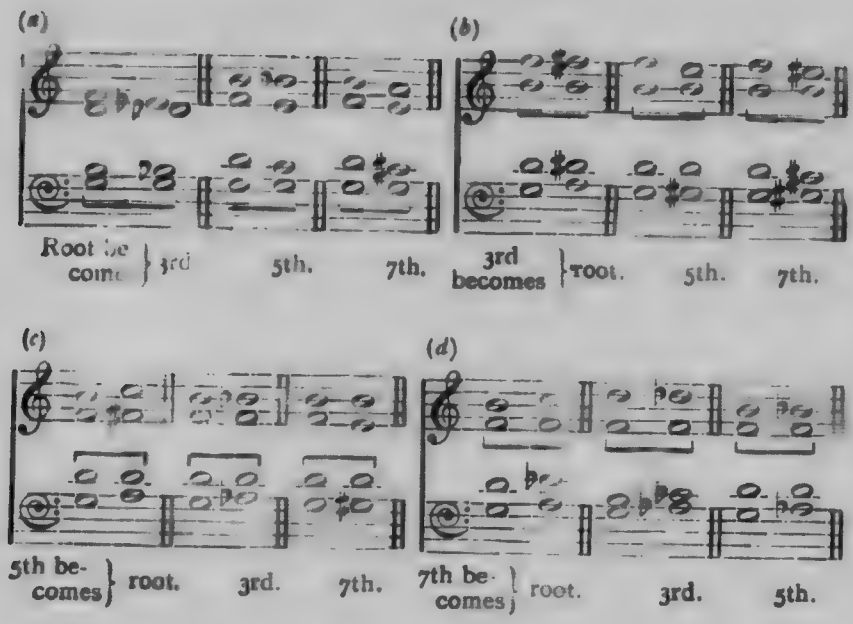
The above illustrates a compound modulation from C, through A minor, B♭ major to E♭ minor.

156. The most common form of modulation is that which is effected by either:

(i.) A chord which is common to the two keys (*see* §65); or—
(ii.) Chords which have a note in common.

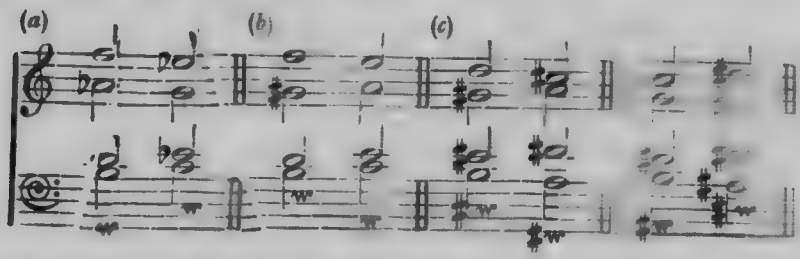
157. Each note of a fundamental discord may be used as any interval of a succeeding fundamental discord, *e.g.*:

The root	may	3rd, 5th, or 7th	of the	(*a*)
3rd	become	root, 5th, or 7th	succeeding	(*b*)
5th	the	,, 3rd, or 7th	chord	(*c*)
7th		,, 3rd, or 5th		(*d*)



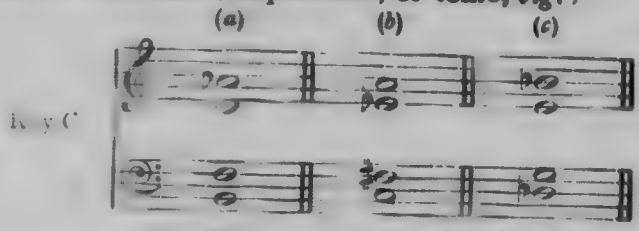
158. Enharmonic Modulation is that in which the character of the modulating chord is changed by altering the name, *but not the sound*, of one or more of its notes.

The diminished 7th (sometimes called the "enharmonic chord" or the "modulating chord") can be so arranged, by enharmonically changing each of its three upper notes in turn, that four roots are possible, *e.g.*:



Roots are indicated by "directs."

159. In each key there are three diminished 7ths derived from the dominant, supertonic, or tonic, *e.g.*:



(*a*) Dominant minor 9th (root G).
(*b*) Supertonic " (root D).
(*c*) Tonic " (root C).

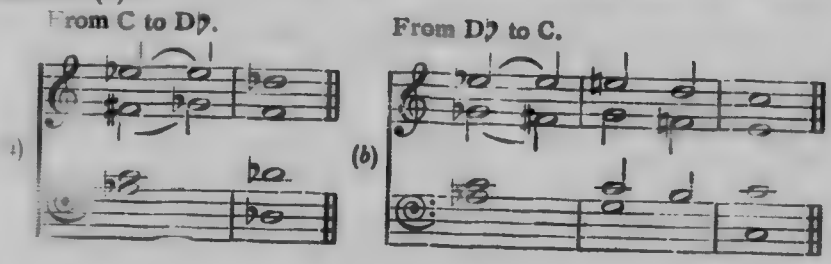
Since each of these chords can be varied by enharmonic change four times (see 158), and may be used in a major or minor key, it follows that every diminished 7th can be derived from one of twenty-four roots.

It is therefore clear that if a chord of the diminished 7th be enharmonically changed, and then quitted either as dominant, supertonic, or tonic, of *the new key*, it is possible to modulate from that chord *into every key*.

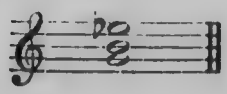
160. If the augmented 6th (German) be enharmonically changed it becomes either a dominant 7th, or a supertonic 7th, or a tonic 7th—whichever is suited to the context. It is thus possible to modulate from this chord to three major (or minor) keys.

The enharmonic change from a German 6th to a dominant 7th is a simple manner of modulating one semitone *upwards* (*a*).

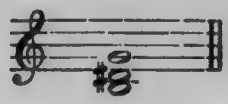
The enharmonic change from a dominant 7th to a German 6th is a simple manner of modulating one semitone *downwards* (*b*):



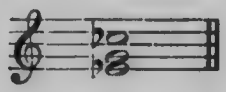
161. If the simple form of the dominant 13th be treated enharmonically and each note be taken, in turn, as the root, three forms of the chord result, which may each be quitted as dominant, supertonic, or tonic of the new key:



(Dominant 13th, key C, root G.)

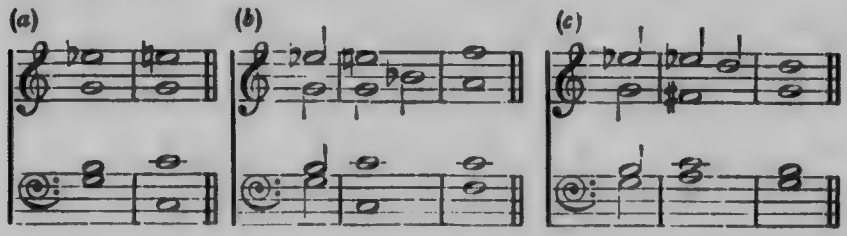


(Dominant 13th, key E root B.)



(Dominant 13th, key A♭, root E♭.)

From a dominant 13th it is therefore possible, by enharmonic change, to modulate to nine major and nine minor keys:

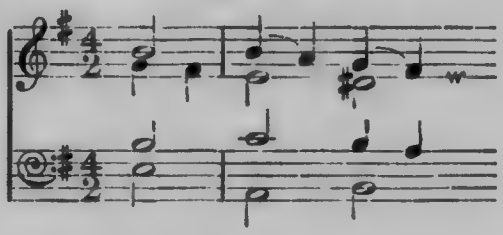


(*a*) Root treated as dominant;
(*b*) " " " supertonic;
(*c*) " " " tonic.

The student should write each of the above in the tonic minor. He should also treat the enharmonic changes of the chord as shown at (*a*), (*b*), and (*c*).

Questions and Exercises on Chapter XX.

1. What is Enharmonic modulation?
2. What is Compound modulation? Write an illustration in the key of A.
3. Write a diminished 7th in the key of G. Enharmonically change each of its notes, in turn, and resolve each chord. Give the roots.
4. How many diminished 7ths are there in each key? Name them, and illustrate your answer in the key of B♭.
5. Write an augmented 6th in the key of A♭. Change it enharmonically to the chord of a dominant 7th, and resolve it.
6. Write a dominant 13th in the key of D, in simple form, and treat it as (i.) a dominant chord, (ii.) a supertonic chord, (iii.) a tonic chord.
7. Begin as follows, and modulate to G major, E minor, A minor, G major, and back to E minor:



8. Modulate from G to A♭, by enharmonic change, and establish the latter key.
9. From the dominant minor 13th, in the key of A♭, modulate to subdominant, enharmonically.

CHAPTER XXI.

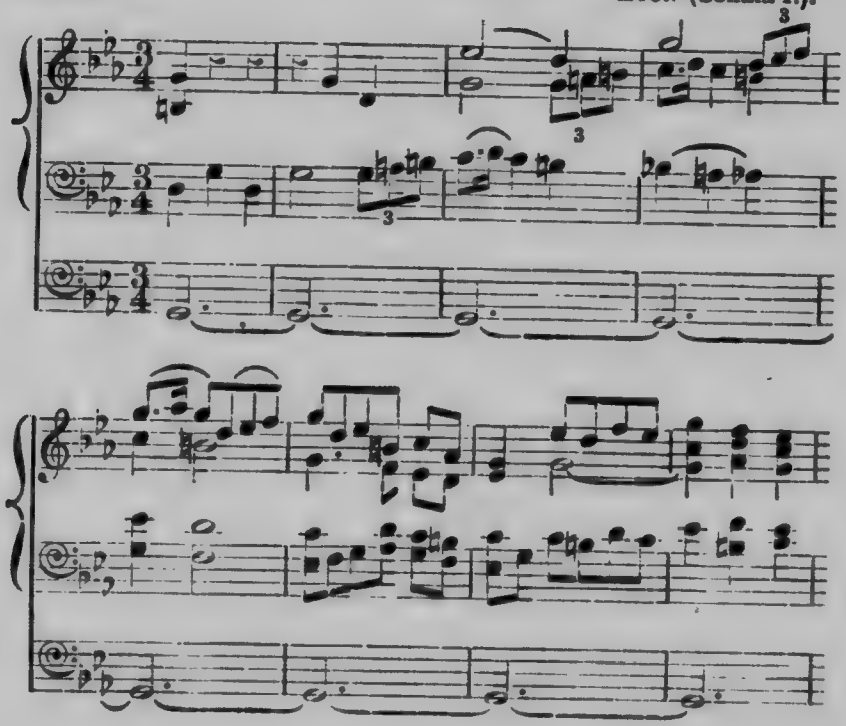
PEDALS.

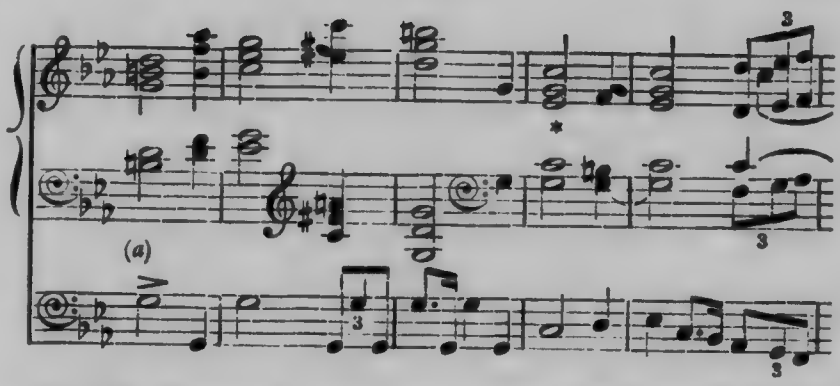
162. A Pedal is a note, sustained or repeated, during a succession of chords to which it may, or may not, be foreign. It appears most generally in the lowest part.

[*The term "pedal" originated with organ music, where a note is sustained in the pedals whilst the other notes or chords are performed on the manuals. For this reason pedal notes are frequently called "organ points" or "pedal points."*]

163. The tonic or dominant are the pedal points chiefly met with. The dominant pedal is particularly useful and effective when it precedes the reappearance of an important subject:

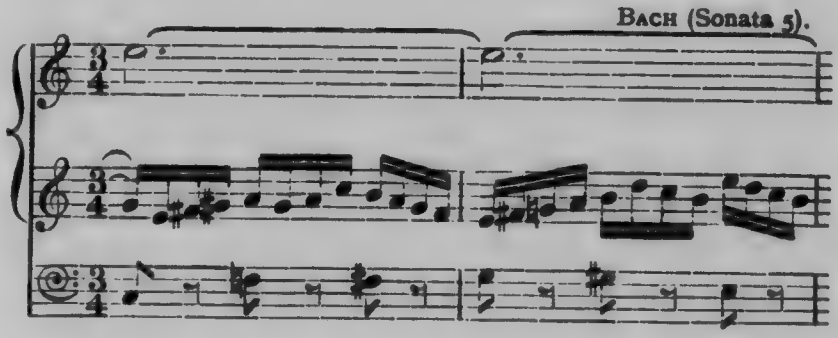
LYON (Sonata I.).





(*a*) The dominant pedal anticipates the rhythm of the entry of the subject (*).

164. When a pedal note appears in any part other than the bass, it is called an Inverted Pedal:



Interesting examples of the use of the inverted pedal abound in the works of the great masters. A splendid example of a pedal-note in an inner part will be found in Mendelssohn's second organ Sonata.

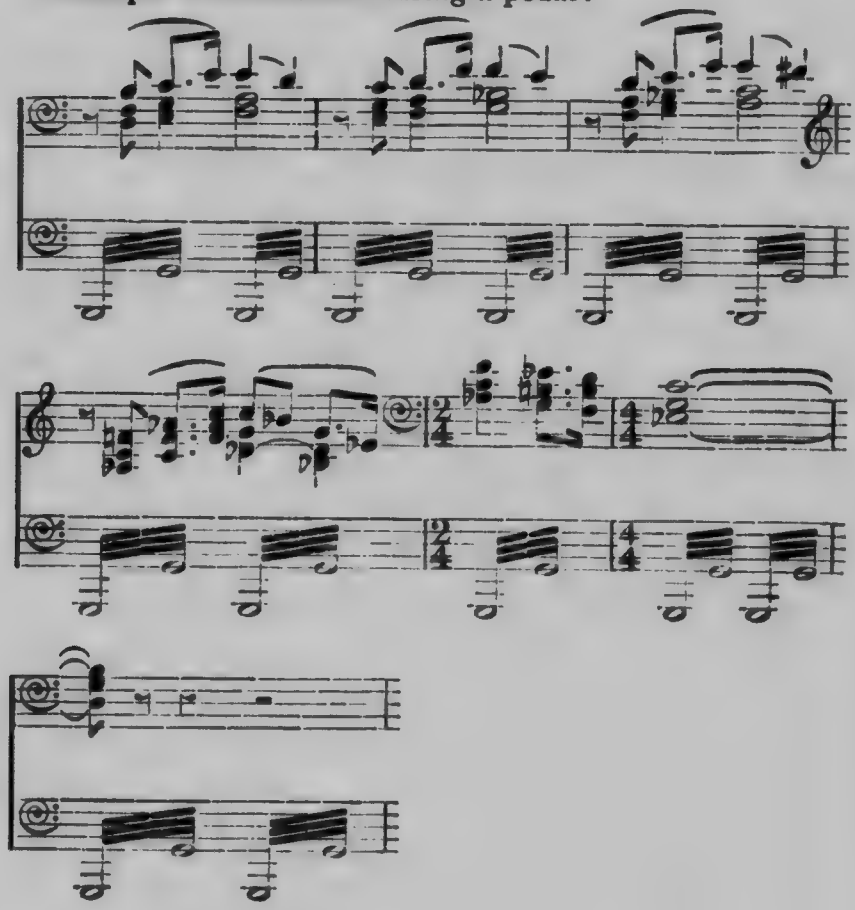
165. When the pedal-note is in the lowest part, the part next above it must be looked upon as the bass, and be subject to the laws affecting that part.

166. Modulation may be introduced freely during a pedal. In the works of the old masters, modulation during a pedal is rare, except:

(i.) When the pedal is tonic and the modulation is to the subdominant, the pedal becoming the dominant of the new key;

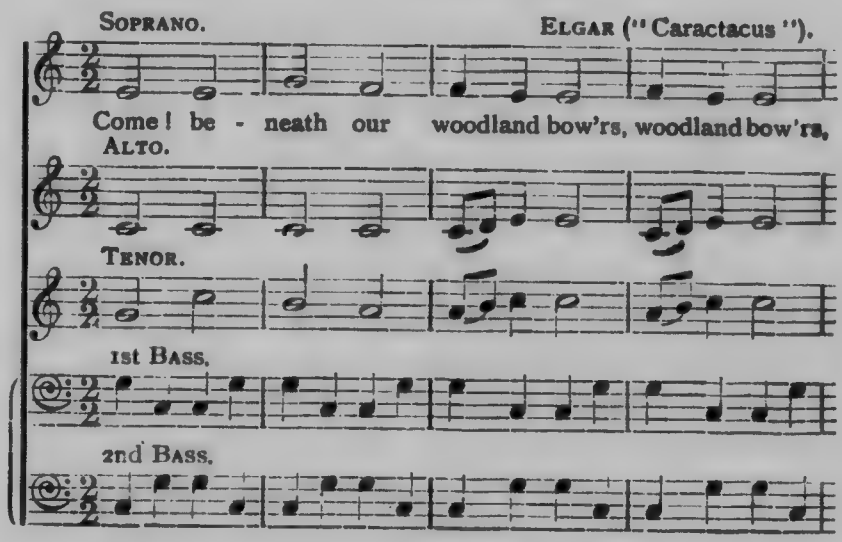
(ii.) When the pedal is dominant, and the modulation is to that key, the pedal becoming the tonic of the new key.

Example of modulation during a pedal:



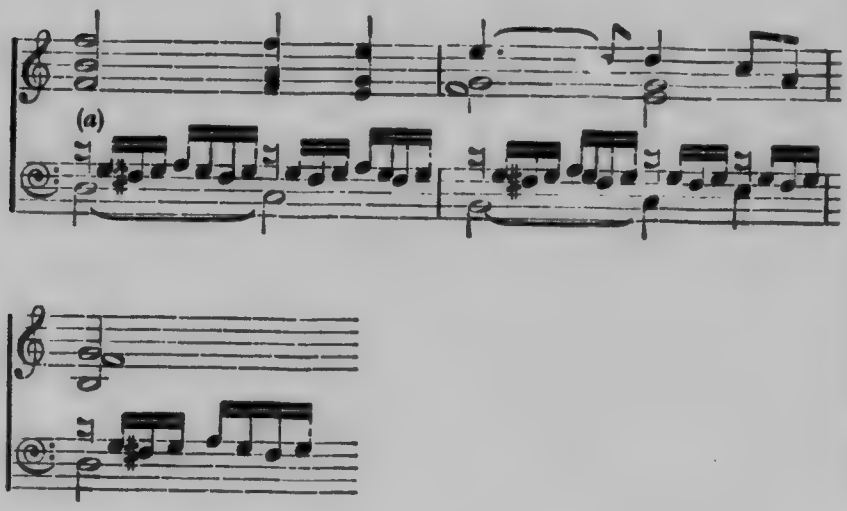
167. A double pedal results when the tonic and dominant are sustained, or repeated, simultaneously.

The following is an interesting example:



168. A triple pedal results when the tonic, dominant, and supertonic are combined and sustained or repeated simultaneously:

169. A pedal may be introduced ornamentally instead of being merely sustained:



(*a*) *The G is ornamented by means of auxiliary notes.*

CHAPTER XXII.

GENERAL HINTS.

170. When harmonizing a melody or unfigured bass:

(i.) Find the cadences.

(ii.) Sketch a simple hymn-tune-like bass, treating as many notes as possible (in the given theme) as unessential notes.

(iii.) Use as few chords as is convenient in each bar.

(iv.) Sketch in the parts to be added. (Elaborate later.)

(v.) Contrast the rhythms of the added parts.

(vi.) Make the harmonies complete—even in three parts.

(vii.) In writing for strings, carefully "bow" each part.

(viii.) Make each part interesting in itself.

171. When the given melody is in an inner part, add the simple bass, find a distinctive rhythm, and sketch the upper part, then add the remaining part or parts.

172. In three-part writing:

(i.) Make each chord as complete as possible.

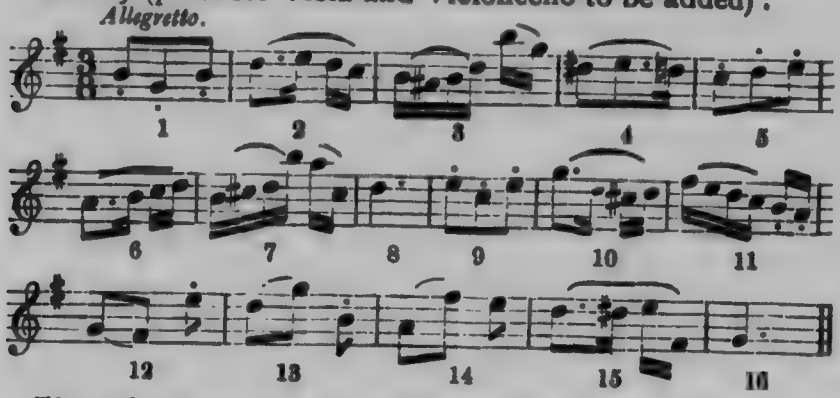
(ii.) Keep the parts equidistant.

(iii.) Avoid ambiguity of chords.

(iv.) Make the parts interesting individually.

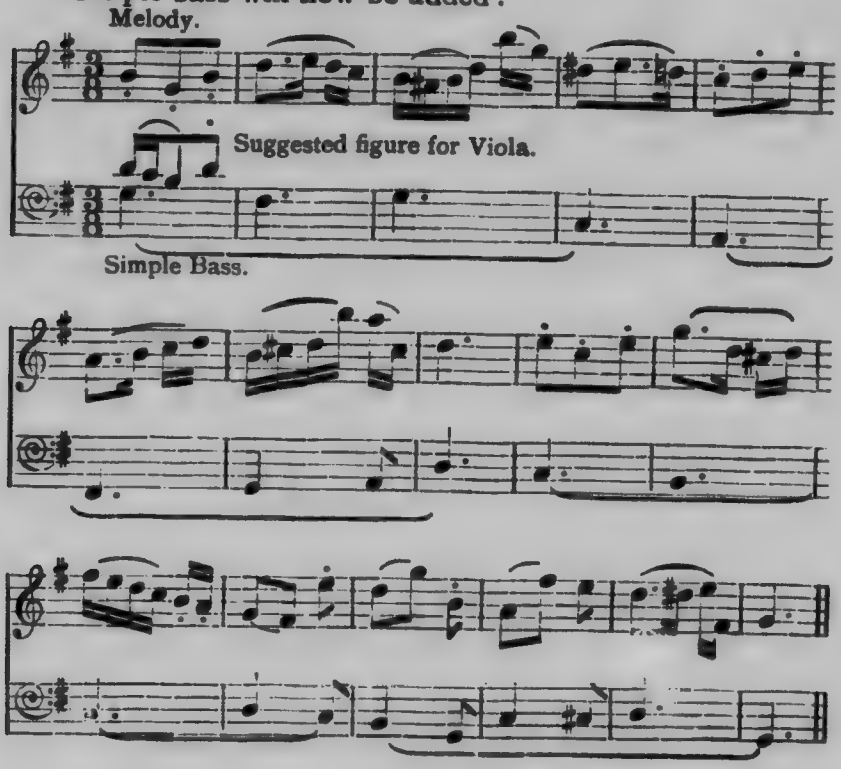
The following is an illustration of the method of procedure in harmonising a melody for string trio:

Melody (parts for Viola and Violoncello to be added):

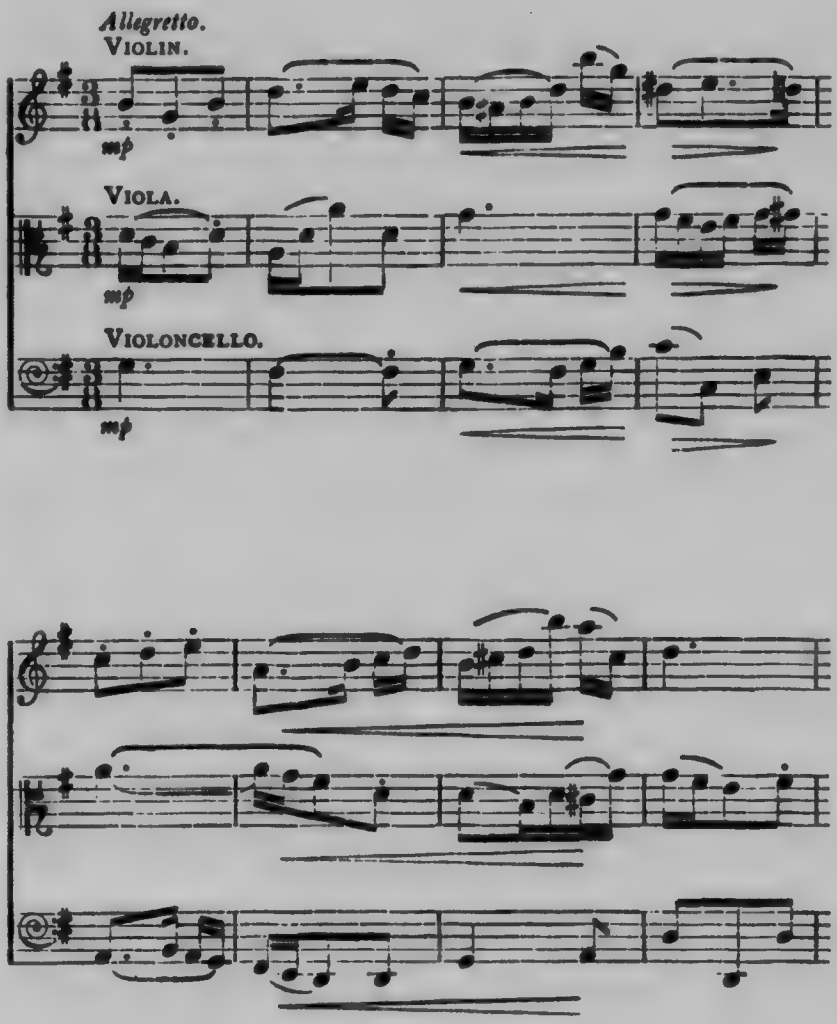


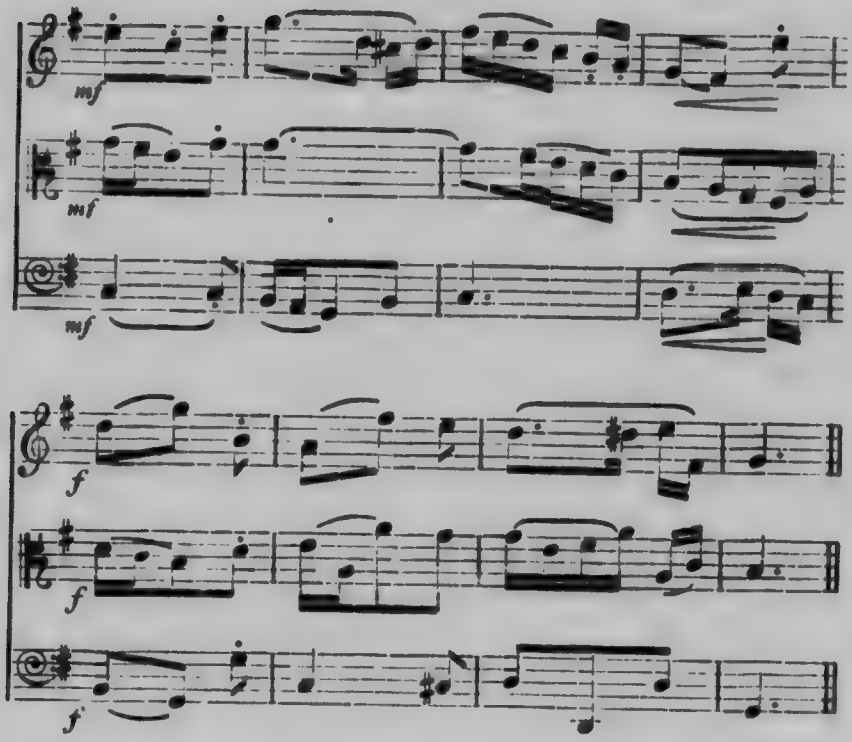
The cadences appear at the 4th, 8th, 12th, and 16th bars.

A simple bass will now be added:

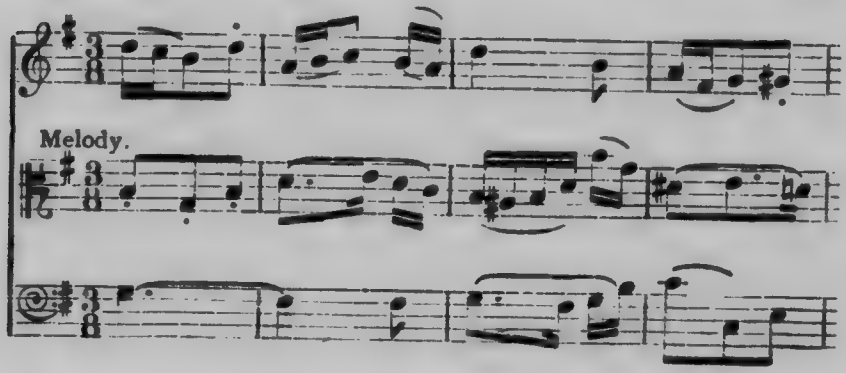


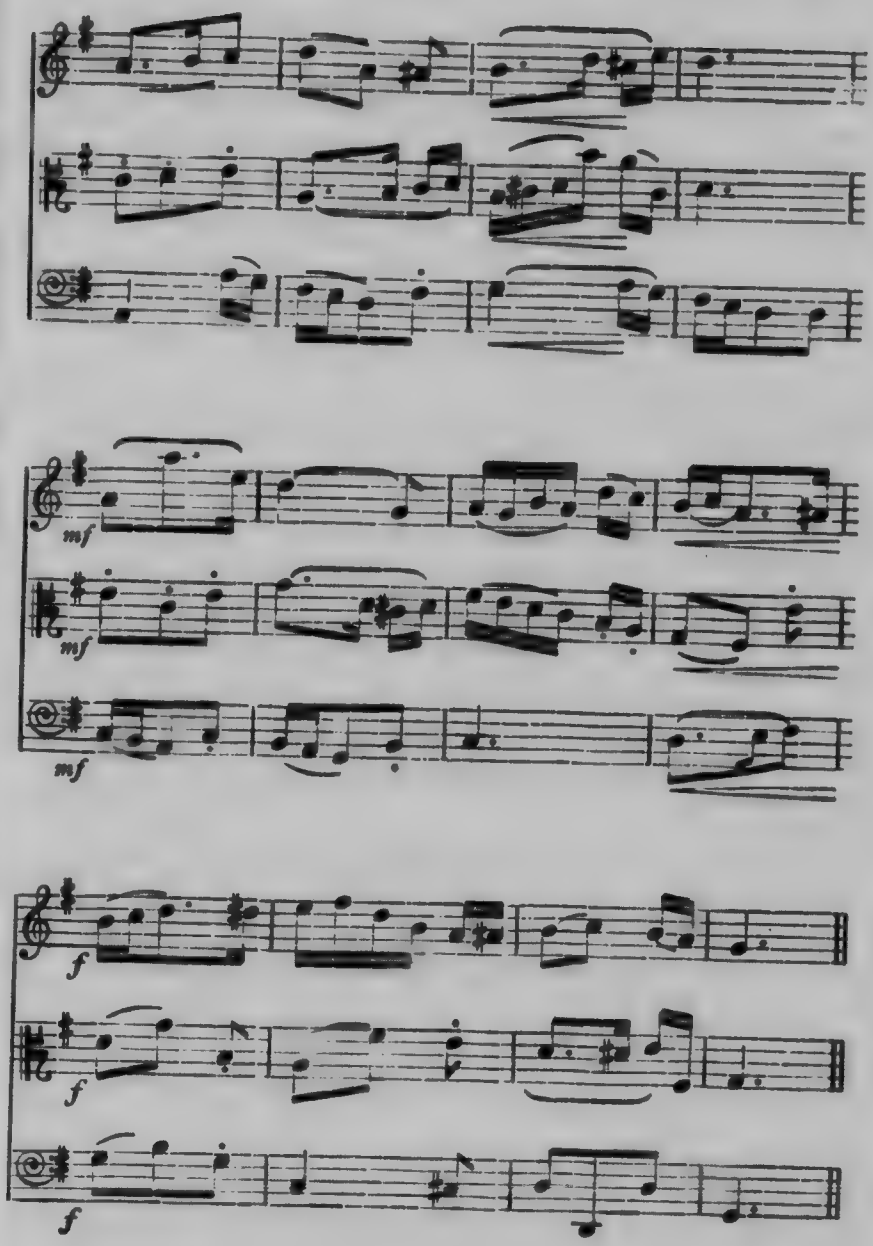
In the 1st bar a "figure" is given which can be carried out in the viola part. The 'cello part can now be elaborated, with the following result:



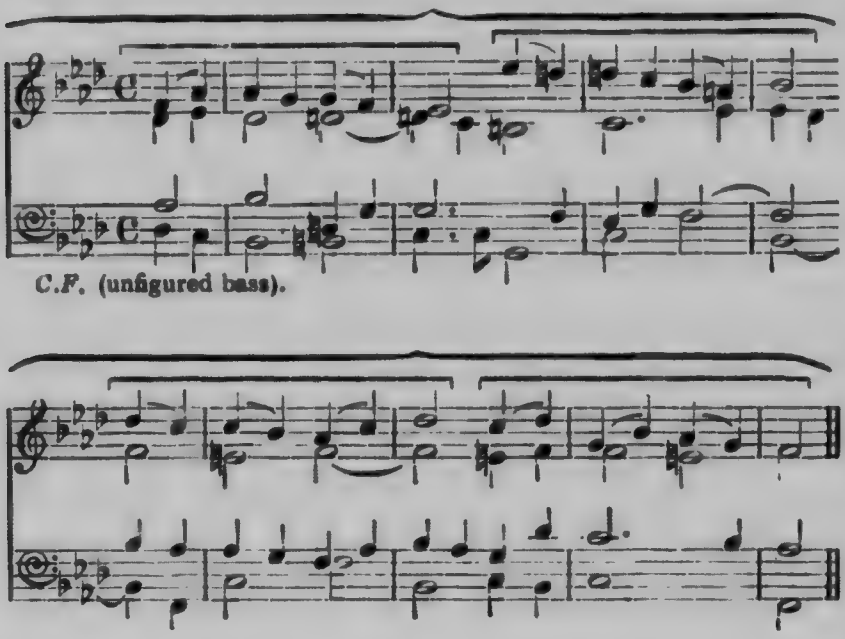


If the melody of the above be given to the viola and a violin and a 'cello part be added, the method will be exactly the same:

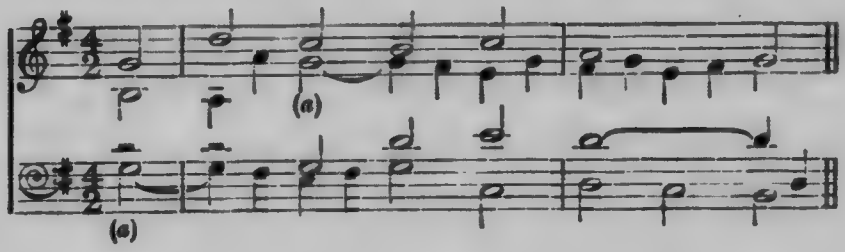


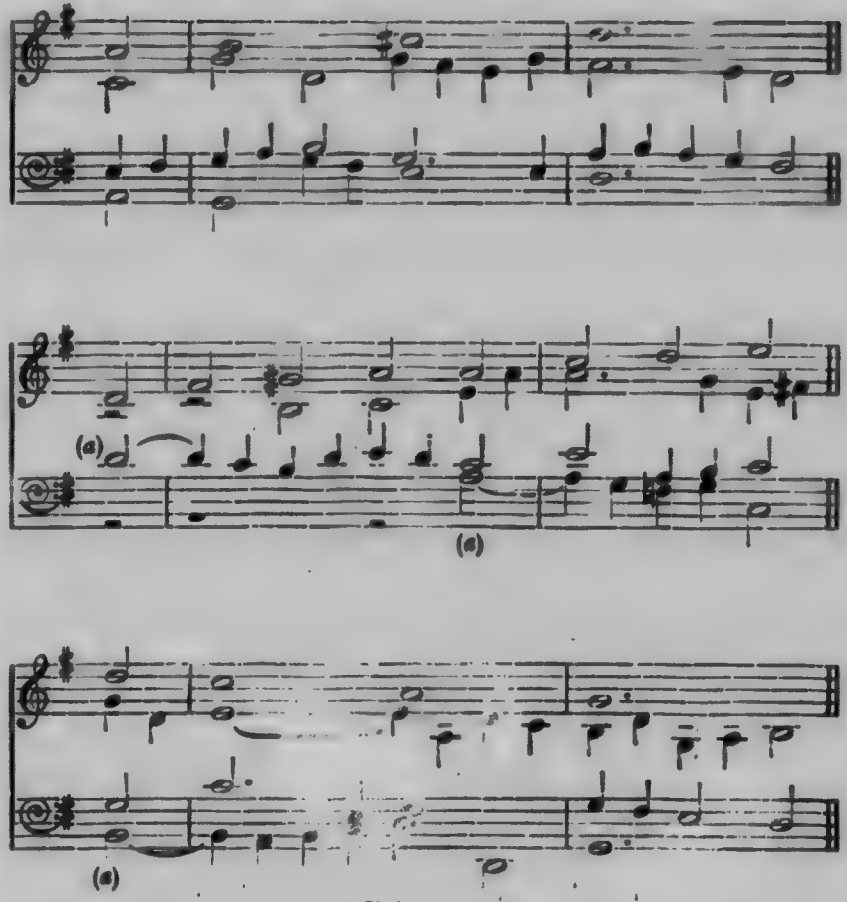

mf
mf
mf
f
f
f

173. An unfigured bass will be treated in a similar manner, but care should be taken to make the *form* of the melody clear and well defined, and not a mere mathematical calculation. This applies also to figured bass. The following is a simple illustration:



174. Example of a chorale, harmonized in four parts introducing passing-notes, suspensions, and imitations:





(i.) *The crotchet movement is maintained, in one or other of the parts, throughout.*

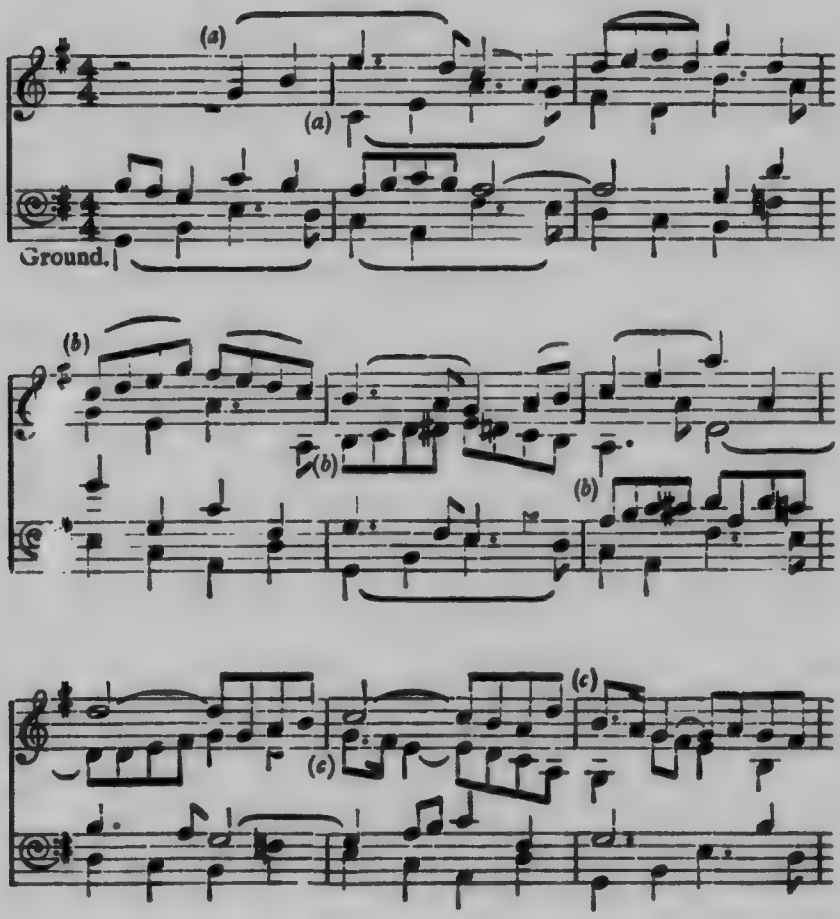
(ii.) *Distinctive figure used* (*a*).

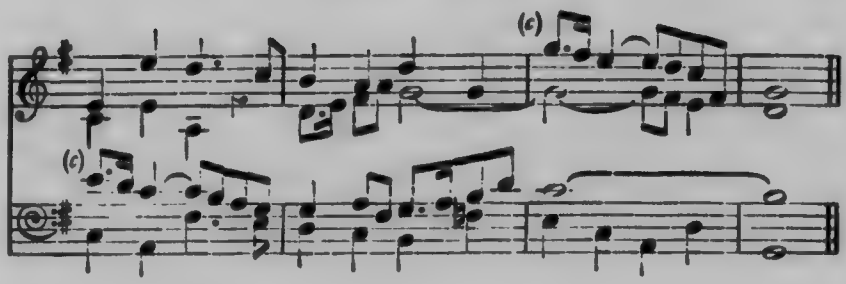
(iii.) *After a rest, a part re-enters with some point of imitation, either of the subject or the "figure."*

175. When a short phrase is repeated in the bass and the harmonies are varied at each repetition it is called a "ground bass."

Imitations and distinctive "figures" (which will become more elaborate as the work proceeds) should be used, and a new "figure" introduced for each repetition.

Example of a "ground" (four bars):





The above is a 4-bar phrase with three harmonizations:

(*a*) *1st figure in imitation of "ground."*

(*b*) *2nd figure*
(*c*) *3rd figure*

Notice that each figure is introduced before *the repetition of the phrase. This binds the work together and makes for continuity.*

176. In writing in five parts, the customary arrangement of the voices is:

(*a*) Two sopranos, alto, tenor, and bass; or

(*b*) Soprano, alto, two tenors, and bass.

177. The laws of four-part writing must be carefully observed.

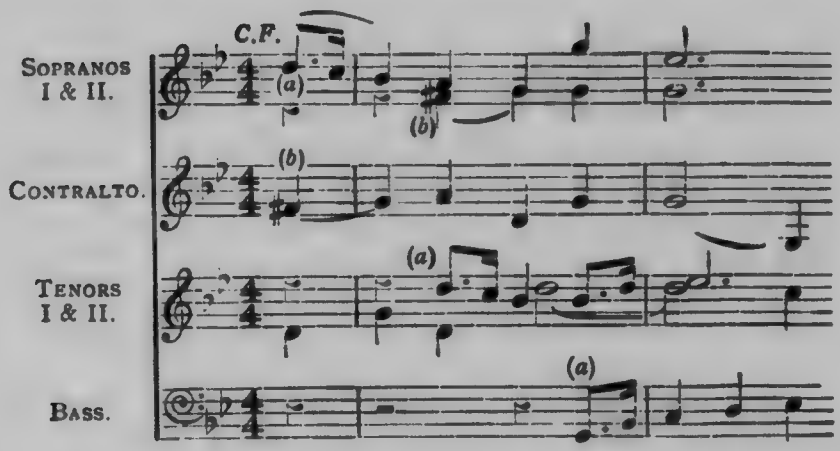
Except: (i.) The major 3rd (unless it be the leading-note) may be doubled.

(ii.) The parts may cross, if by doing so a better progression of parts is obtained.

(iii.) Consecutive 8ths may be used sparingly, in contrary motion.

178. When it is required to add five or more parts to a melody, inner part, or bass, it is not necessary that the parts should enter together, *e.g.*:

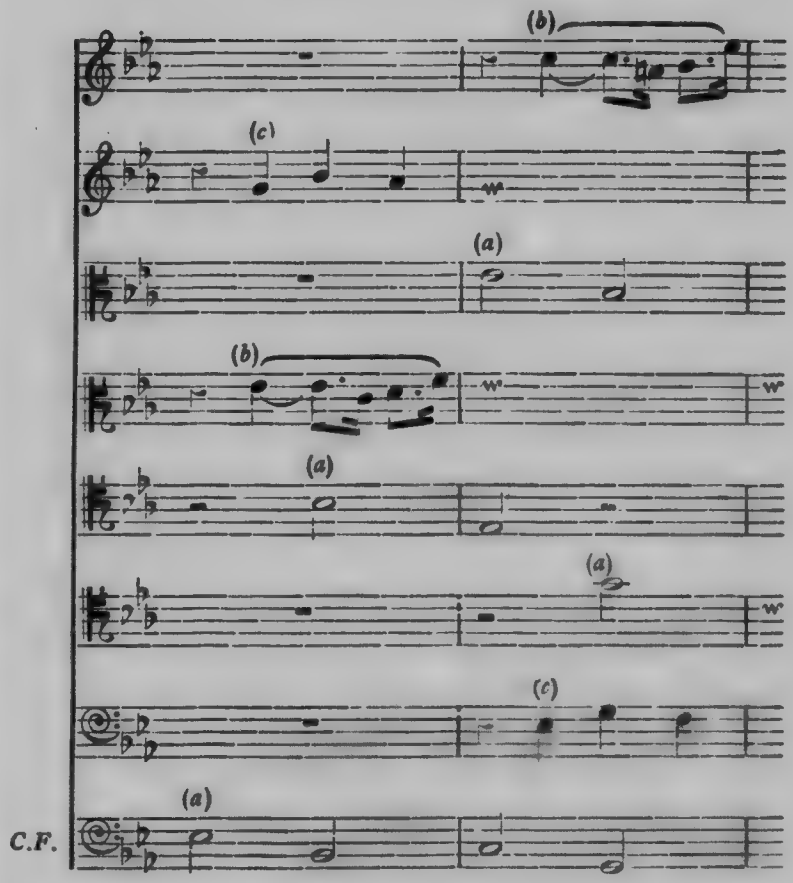
Two distinctive figures used:



(*a*) 1st tenor and bass imitate *C.F.*

(*b*) 2nd treble imitates alto.

Three distinctive figures used:



(*a*) The 1st tenor, 1st alto, and 2nd tenor imitate the *C.F.* in turn.

(*b*) Distinctive figure in 2nd alto and 1st treble.

(*c*) Distinctive figure in 2nd treble and 1st bass.

179. The student who has carefully studied the contents of this short work will now find no difficulty in harmonizing melodies and basses, but only by constant practice in three-, four-, and five-part writing, treating each exercise as an art-work and not as a mathematical problem, will he attain that fluency which is necessary before he can hope to write anything "worth while" in six, seven, and eight parts.

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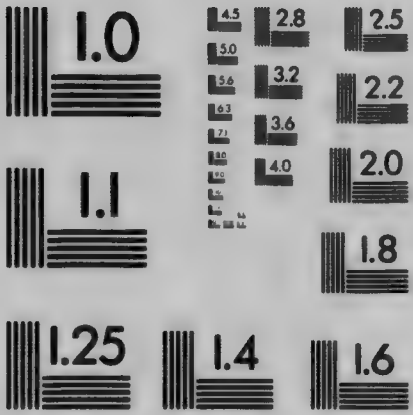

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